# THE HEMIPTERIST

# A JOURNAL ON THE NATURAL HISTORY OF THE HEMIPTERA OF THE BRITISH ISLES



Volume 7 (2020)

#### THE

#### **HEMIPTERIST**

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Cover photograph: Corizus hyoscyami (Linnaeus) (Hemiptera: Rhopalidae).

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## A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (1) INTRODUCTION

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#### **Background**

Hitherto, this journal has largely concentrated on geographical distribution. Although this topic is by far the most popular amongst publishing heteropterists, it is only one component of Heteroptera natural history. There is also seasonal distribution, the associations with host plant, habitat, predator, prey and parasites, and details of behaviour, such as feeding and egg-laying. This neglect ends here.

In this and the next five volumes of this journal, the primary focus will be on these other aspects of natural history. A comprehensive review of the published records is already underway, and the results will be presented in this journal family by family, until all the species of the British Isles Hemiptera-Heteroptera have been covered.

This might seem a rather straightforward matter of going through the literature since the last textbook (Southwood & Leston, 1959), and adding anything new. The species new to the British Isles since this textbook have already been researched and species accounts published (Ryan, 2018c), so it would seem that only additional information for the species in the textbook need be gathered. However, as has already been stated (Ryan, 2019b), there are problems with this simple approach.

First, a deficiency of the last textbook is that it does not provide a comprehensive review of the literature. Furthermore, although the preceding text (Butler, 1923) did review the literature at that time, it frequently confused reports from foreign sources with those from the British Isles, not always making clear from where information had been obtained. It is important to separate British Isles and foreign records as the natural history of a species here may not be the same as elsewhere, and a comparison of the natural history in different parts of the world is frustrated if the records are confused. Second, the monthly-basis of Butler's seasonal distribution has been replaced with a more precise heximonth-basis (Ryan, 2018e), for which his records cannot be used. For these reasons a fresh literature search, going back to the beginning, is required, taking care to select only those records which clearly state a British Isles origin.

#### **Approach**

A key date in the study of the British Isles Hemiptera-Heteroptera is 1864. Historically, the most important entomological journal in the British Isles, the *Entomologists' Monthly Magazine*, commenced publication in July 1864; and in the following year the first comprehensive textbook for the British Isles Heteroptera was published, Douglas & Scott (1865). This date was therefore chosen for the beginning of the literature search, which includes all the British Isles entomological journals published from this time to the present, together with selected additional works that were found to be rich in relevant records. These sources are listed in Tables 1 and 2.

The method for reviewing the literature is not, as might seem logical, to gather everything at once, starting in 1864 and continuing until the present is reached, as this would only produce a result at the end of the exercise, which will take several years to complete. Instead, as has been the case with previous projects, the review is to be conducted in instalments, in this case family by family. This alternative approach requires an index to the literature, from which all the relevant articles for each family can be identified, when required. Sadly, the published indices for the literature, where they exist, are often inadequate, so the first step in the review was to compile a bespoke index. This had already been done for the *Heteroptera Study Group Newsletter* and *Het News (Second and Third Series)* (Ryan 2017a, 2018d), but the rest of the literature had to be included by going through the contents lists and special indices for each volume of each journal and then adding the found articles to the index. This index is now complete up to the end of 2019. It has over 48,000 entries and exists as a database of spreadsheets. Only articles relating to Heteroptera natural history in the British Isles are included.

Prior to the review of each family, bespoke software written in Microsoft Visual Basic is used to generate a reference list from the index database for that family. These references are consulted one-by-one and any British Isles records found are entered into a spreadsheet. At the conclusion of the family review, bespoke software is used to generate a draft paper from the spreadsheet of found records. This draft is then tidied-up by hand to create the final paper for publication in this journal.

#### Found records

Three kinds of record are gathered in the family reviews, all of which must have an explicitly stated British Isles location.

First, geographical records which can be unambiguously assigned to a unique vice-county, where these are new to the Vice-county Distribution and Atlas (Ryan, 2019a). Other location records, which are not precise enough to be assigned to a unique vice-county, or which duplicate a record already in the Atlas, are not gathered. Consequently, the geographical distribution does not contain all vice-county records, only representative records, one for each species-vice-county combination. Historically, this is the way the geographical distributions of the Heteroptera have been managed. This initiative has been running since Ryan (2014a & 2014b), and as previously, new records are published in separate articles, outside the family reviews.

Second, seasonal records which can be unambiguously assigned to a unique heximonth, expanding upon the limited distribution of Ryan (2018e). Unlike the geographical distribution, all British Isles records are collected, rather than just a single representative record for each species-heximonth combination. Multiple records provide confirmation that a species has indeed been recorded for the heximonth; and if there are sufficient records collected, this might allow the plotting of a histogram showing the rise and fall of the species over time. With the benefit of hindsight, this might have been the way the vice-county distribution could have been conducted; and I was tempted to put this right in the family reviews by collecting all vice-county records. However, the burden would be too great. There are just too many records, and it would consume too much time and space listing them all. So, the Vice-county Distribution and Atlas remains based upon representative records only.

Third, detailed records which contain details of natural history in the British Isles beyond location and date. As has already been stated, these include associations with host plant, habitat, predator, prey and parasites, and details of behaviour, such as feeding and egg-laying. Anatomical and physiological details are not collected, except where they are incidental to an otherwise relevant record. Consequently, although the behaviours of feeding and egg-laying are of interest, the anatomy and physiology of the digestive and reproductive system are not in scope. To fully include such details would involve a much broader literature search, which would burden the project; and I take the view that such topics do not fall within the subject of natural history.

#### **Presentation**

The heximonth and detailed records are listed separately in each family review, species by species. As already stated, any new geographical records are listed elsewhere, outside the family reviews. Duplicate records (same date, location and details, published in different articles) are eliminated, only the original record being listed.

Another difference with the geographical distribution is in the treatment of ambiguous species names (Ryan, 2015, 2016a, 2018a & 2018b). Where a species name cannot be assigned unambiguously to a unique modern-day species, it is discounted as a geographical record, following historical precedent. For species whose records have been greatly depleted by a 'species-split', this loss of information can be significant. Consequently, with the seasonal and detailed records, those relating to ambiguous species names are gathered, but are listed separately from the others.

A bibliography of all the articles consulted for each species is also listed in each family review. The articles are grouped by the used name in the articles, which provides a synonymy for each species, within the scope of the review (see Tables 1 and 2). It also provides a means for the reader, if so inclined, to do their own literature search and gather a complete set of records, including those I have excluded, as stated above.

Each family review concludes with a set of tabulated summaries, one for each species, summarising the information gathered in the review, together with that of the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/britishhetbugatlas). This includes a vice-county distribution map from the Atlas, a calendar depicting the heximonth records, and a précis of the detailed records. Records relating to ambiguous species names are not included. The summaries are illustrated with habitus images of the species, where these are available.

#### Referencing

As with the Atlas, all records listed in the family reviews are referenced to their source, so that the reader may refer back to the original record. There are no formal reference lists in the family reviews, as generally used in articles in this journal, as these would be very long and take up too much time and space to compile. Instead, a form of abbreviated, in-line referencing is used, comprising an abbreviation of the journal (see Tables 1 and 2), volume number and page. For the *Heteroptera Study Group Newsletter*, *Het News (Second and Third Series)* and this journal, the specific page containing the record is given; but for other journals the page range of the whole article is stated. By way of an example, this page would be referred to as 'Hem7:3'. For sources other than journals, only an abbreviation is given, without volume and page.

#### Replacement of Southwood & Leston (1959)

As has already been stated (Ryan, 2019b), the family reviews will also be published on the internet, and when complete will provide a comprehensive update to the last textbook on the British Isles Hemiptera-Heteroptera (Southwood & Leston, 1959), in terms of the published evidence for the British Isles. However, to be a truly complete replacement, the draft keys presently in circulation need to be published, and I will need assistance in completing the collection of habitus photographs for all the British Isles species. I urge the authors of the draft keys to complete and publish their work; and would be grateful to any reader who can fill gaps in my collection of habitus photographs, or who can send me live material from which I can take the photographs myself. My method for taking habitus photographs has been published (Ryan, 2016b).

#### Conclusion

It will occur to the reader that even with published keys and more habitus photographs, the family reviews will still be far from complete. There are many, many other sources outside those listed in Tables 1 and 2, such as the plethora of local wildlife magazines and newsletters, which, although not being specialist entomological texts, do contain occasional records of Heteroptera. And, as already stated, there are records which will be excluded from the reviews because they cannot be uniquely assigned to a specific vice-county or heximonth, or which do not have an explicitly stated British Isles origin. However, even with these records, not a single species would have a complete description of its natural history.

I propose to start tackling other sources of records, in addition to new publications in the journals listed in Tables 1 and 2, and provide addenda to the family reviews, once all the family reviews in the present scope are complete. However, the only way to fill the many, many gaps in our knowledge of the British Isles Heteroptera is by conducting bespoke field work.

I therefore urge readers to use the reviews as an indication not only of what <u>is</u> published in the entomological literature but also of what <u>is not</u> published; and to add to our knowledge by publishing their own fieldwork, especially where this fills gaping holes in the species accounts.

TABLE 1. The entomological journals and other sources included in the literature search for the review of the published records for the Hemiptera-Heteroptera of the British Isles, with their abbreviations.

Antenna Antenna

AntGuests Guests of British ants, their habits and life-histories (Donisthorpe, 1927)

**APSLENHS** Abstract of Proceedings of the South London Entomological and Natural History Society

Atropos

**BJENH** British Journal of Entomology and Natural History

Butler1923 Biology of the British Hemiptera-Heteroptera (Butler, 1923)

Land and freshwater bugs (Hemiptera) of Cornwall & the Isles of Scilly (Alexander, 2008) CornwallHets

D&S1865 British Hemiptera-Heteroptera (Douglas & Scott, 1865)

**EcolEnt** Ecological Entomology Entomologists' Gazette EG

Entomologists' Monthly Magazine **EMM** 

Entomologist Ent

**ERJV** Entomologists' Record and Journal of Variation

GloucsHets Land and freshwater bugs (Hemiptera) of Gloucestershire: Parts 1-3 and updates.

Gloucestershire Naturalist 8: 37-53, 9: 31-62, 15: 59-60, 16: 28-41, 17: 8-9 (Alexander, 1995,

1996, 2004, 2005 & 2006)

HantsHets Account of the Hemiptera-Heteroptera of Hampshire and the Isle of Wight; with additional

notes on British species not recorded for the county. Entomologists' Record and Journal of

Variation 40-42, Supplement, 1-87 (Jones, 1928-1930)

Hem Hemipterist

HN Het News (Second and Third Series) **HSGN** Heteroptera Study Group Newsletter

Huxley2003 Provisional atlas of the British aquatic bugs (Hemiptera, Heteroptera) (Huxley, 2003) IrelandHets List of the Irish Hemiptera (Heteroptera and Cicadina). Proceedings of the Royal Irish

Academy. Section B: Biological, Geological, and Chemical Science 42: 211-318 (Halbert,

Journal of the Entomological Society of the South of England **JESSE** 

JoE(A) Journal of Entomology. Series A

**JSBE** Journal of the Society for British Entomology

Macan1965 *Key to British water bugs (Hemiptera-Heteroptera)* (Macan, 1965)

LondonHets Hemiptera-Heteroptera of the London area. Parts I-XVI. London Naturalist 43: 34-66, 44: 82-

> 110, **45**: 63-88, **46**: 82-104, **47**: 50-80, **48**: 86-120, **50**: 87-94, **52**: 31-59, **54**: 21-34, **55**: 6-15, **56**: 32-43, **61**: 72-87, **62**: 69-86, **63**: 97-120, **64**: 63-94, **65**: 119-177 (Groves, 1964-1986)

**PESL** Proceedings of the Entomological Society of London

PRESL(A) Proceedings of the Royal Entomological Society of London. Series A Proceedings of the Royal Entomological Society of London. Series C PRESL(C) **PSLENHS** Proceedings of the South London Entomological and Natural History Society

**PTBENHS** Proceedings and Transactions of the British Entomological and Natural History Society **PTSLENHS** Proceedings and Transactions of the South London Entomological and Natural History

Society

S&L1959 Land and water bugs of the British Isles (Southwood & Leston, 1959) Saunders1892 Hemiptera-Heteroptera of the British Islands (Saunders, 1892)

Savage1989 Adults of the British aquatic Hemiptera-Heteroptera: a key with ecological notes (Savage,

1989)

SuffolkHets Hemiptera of Suffolk (Morley, 1905)

SuffolkHetsAnn Author's annotations to Hemiptera of Suffolk (Morley, 1905) (copy held in Biodiversity

Heritage Library, https://www.biodiversitylibrary.org/)

Synopsis of British Hemiptera-Heteroptera. Parts I-III. Transactions of the Entomological Synopsis1875

Society of London 1875: 117-159, 1875: 245-309, 1876: 613-655 (Saunders, 1875-1876)

**TESL** Transactions of the Entomological Society of London

Transactions of the Entomological Society of the South of England **TESSE** 

**THES** Transactions of the Hampshire Entomological Society

**TPSLENHS** Transactions and Proceedings of the South London Entomological and Natural History

Society

**TRESL** Transactions of the Royal Entomological Society of London

**TSBE** Transactions of the Society of British Entomology

TABLE 2. The list of sources in Table 1 appears to be a rather random collection, but this is largely due to journals changing their names over the course of time. The following groupings may make the scope of the sources clearer.

Specialist Hemiptera journals: HSGN; HN; Hem.

Royal Entomological Society: PESL; TESL; PRESL(A); PRESL(C); TRESL; JoE(A); Antenna; EcolEnt.

British Entomological and Natural History Society: APSLENHS; PSLENHS; TPSLENHS; PTSLENHS; PTBENHS; BJENH.

Society of British Entomology: THES; TESSE; JESSE; TSBE; JSBE.

Other entomological journals: EMM; Ent; ERJV; EG; Atropos.

Specialist Hemiptera texts: D&S1865; Synopsis1875; Saunders1892; Butler1923; S&L1959.

Regional Hemiptera texts: SuffolkHets; SuffolkHetsAnn; IrelandHets; HantsHets; LondonHets; GloucsHets; CornwallHets.

Water bug keys and atlas: Macan1965; Savage1989; Huxley2003.

Other entomological texts: AntGuests.

#### References

Butler, E. A. 1923. Biology of the British Hemiptera-Heteroptera, H. F. & G. Witherby, London.

Douglas, J. W. & Scott, J. 1865. British Hemiptera-Heteroptera, Ray Society.

Ryan, R. P. 2014a. The county distribution of the Hemiptera-Heteroptera of the British Isles, fourth edition. *Hemipterist* 1: 38-103.

Ryan, R. P. 2014b. An Atlas of the Hemiptera-Heteroptera of the British Isles. https://sites.google.com/site/BritishHetBugAtlas.

Ryan, R. P. 2015. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera since Massee (1955). *Hemipterist* 2: 4-8.

Ryan, R. P. 2016a. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera from Butler (1923) to Massee (1955). *Hemipterist* 3: 15-17.

Ryan, R. P. 2016b. A photographic method for creating habitus images of Hemiptera-Heteroptera. British Journal of Entomology and Natural History **29**: 249-251.

Ryan, R. P. 2017a. A special index for the Heteroptera Study Group Newsletter. Hemipterist 4: 1-14.

Ryan, R. P. 2017b. A special index for Het News, newsletter of the UK Heteroptera Recording Schemes (Second Series). *Hemipterist* **4**: 67-80.

Ryan, R. P. 2018a. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera from Saunders (1892) to Butler (1923). *Hemipterist* **5**: 14-15.

Ryan, R. P. 2018b. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera from Douglas & Scott (1865) to Saunders (1892). *Hemipterist* 5: 114-118.

Ryan, R. P. 2018c. An annotated addendum to Southwood & Leston's land and water bugs of the British Isles. https://sites.google.com/site/britishhetbugatlas.

Ryan, R. P. 2018d. A special index for Het News, newsletter of the UK Heteroptera Recording Schemes (Third Series). *Hemipterist* 5: 148-154.

Ryan, R. P. 2018e. A seasonal distribution of the adult Hemiptera-Heteroptera of the British Isles. *Hemipterist* **5**: 52-68.

Ryan, R. P. 2019a. The vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. *Hemipterist* **6**: 1-210.

Ryan, R. P. 2019b. The update of Southwood & Leston (1959). Hemipterist 6: 285-287.

Southwood, T. R. E. & Leston, D. 1959. *Land and water bugs of the British Isles*, Frederick Warne & Co. Ltd., London.

# A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (2) THE FAMILY ARADIDAE

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#### Introduction

This is the second part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Aradidae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

#### **Heximonth records**

Aneurus avenius (Dufour) (Aradidae)

02D: 20 February 1960 [Magpie Bottom, near Shoreham, Kent. LondonHets]

03A: 2 March 1963 [Godstone, Surrey. LondonHets]

03F: 26 March 1983 [Emer Bog NR, South Hampshire. Hem3:103]

04E: 23 April 1944 [Fiddler's Elbow, near Monmouth, Monmouthshire. EMM91:143] 21 April 2011 [Woodmancote, Gloucestershire. HN17/18:21]

05A: 5 May 1940 [Hurtwood Common, Surrey. LondonHets] 2 May 1949 [Mickleham, Surrey. LondonHets]

05B: 8 May 1954 [Effingham, Surrey. LondonHets]

05C: 15 May 2014 [Brandon, West Norfolk. Hem3:92]

05E: 22 May 2010 [Homefield Wood, Medmenham, Buckinghamshire. Hem1:30]

05F: 31 May 1952 [Monk's Wood, Huntingdonshire. Adult and nymphs. EMM88:162]

06B: 8 June 1938 [Boxhill, Surrey. LondonHets]

06E: 25 June 2011 [Hawkhill Inclosure, near Brockenhurst, New Forest. Hem1:30] 25 June 1950 [Salcey Forest, Northamptonshire. Males. EMM93:49-51]

07A: 4 July 1944 [Priory Grove Wood, near Monmouth, Monmouthshire. EMM91:143]

08A: 1 August 2008 [Stevenshill, Cound, Shropshire. Hem5:155]

08B: 7 August 2015 [Brandon, West Suffolk. Hem3:92]

08E: 23 August 1961 [Old Tinworks, Kidwelly, Carmarthenshire. Adults and nymphs. EMM97:200]

- 09B: 9 September 1949 [Bookham Common, Surrey. LondonHets]
- 09F: 29 September 1963 [Farningham Wood, Kent. LondonHets]
- 12A: 4 December 1920 [Knockholt, Kent. LondonHets]

#### Aneurus laevis (Fabricius) (Aradidae)

- 01A: 5 January 1964 [Yorkletts, near Whitstable, Kent. Adults. EMM110:121]
- 01B: 6 January 1960 [Farningham Wood, Kent. LondonHets]
- 03B: 8 March 1992 [Speech House, Dean, Gloucestershire. GloucsHets]
- 04A: 2 April 1956 [Farningham Wood, Kent. LondonHets] 5 April 1986 [Miserden Park, Gloucestershire. GloucsHets]
- 04D: 18 April 1953 [Effingham, Surrey. LondonHets] 18 April 1960 [Windlesham, Surrey. LondonHets]
- 04E: 23 April 2004 [Ham Street Wood NNR, West Kent. Adults and nymphs. HN3:6] 24 April 1954 [Oxshott Heath, Surrey. LondonHets]
- 05A: 2 May 1953 [Effingham, Surrey. PTSLENHS1953-54:77-78]
- 05B: 10 May 2001 [Wickham Common, South Hampshire. Hem3:103]
- 05D: 16 May 1953 [Theydon Bois, Epping Forest, Essex. LondonHets]
- 05F: 26 May 2004 [Chilling Copse, South Hampshire. BJENH19:189] 27 May 1950 [Church Woods, Blean, Kent. EMM86:224]
- 06B: 9 June 1951 [Painswick Common, Gloucestershire. GloucsHets]
- 07A: 3 July 2015 [Padworth, Berkshire. BJENH29:69-88]
- 09B: 9 September 1949 [Bookham Common, Surrey. LondonHets]
- 10F: 28 October 1951 [Westerham, Kent. LondonHets]
- 11A: 5 November 1964 [Farningham, Kent. LondonHets] 1 November 2010 [Wicken Fen, Cambridgeshire. Hem4:144]
- 12A: 4 December 1983 [Chedworth Woods, Gloucestershire. GloucsHets]

#### Aneurus laevis/avenius AMBIGUOUS (Aradidae)

- 06C: 11 June 1898 [Oxted, Surrey. LondonHets]
- 08E: 21 August 1904 [Darenth Wood, Kent. PSLENHS1904:75]
- 11B: 10 November 1882 [Ruislip Wood, Middlesex. LondonHets]

#### *Aradus aterrimus* Fieber (Aradidae)

- 04B: 7 April 2015 [Bysing Wood, near Faversham, Kent. BJENH28:128]
- 04F: 30 April 1977 [A27 just west of Arundel, Sussex. EMM113:120]
- 05F: 30 May 1861 [Darenth Wood, Kent. Female. D&S1865]
- 11F: 26 November 1933 [Near East Malling, Kent. Nymph reared in culture. EMM71:41]

#### Aradus betulae (Linnaeus) (Aradidae)

- 06E: 21 June 1964 [Close to the shores of Loch Rannoch, at the western end of the Black Wood of Rannoch, Perthshire. Adults. EMM110:252]
- 07B: 10 July 1921 [Near Camaghouran, Rannoch, Perthshire. EMM57:227-229]
- 07E: 22 July 1992 [Strathfarrar, VC96. BJENH7:174-175]
- 07F: 30 July 1929 [Near Guishachen, East Inverness-shire. EMM98:264]
- 08A: 5 August 1987 [Boat of Garten, Inverness. BJENH2:54] 1 August 1974 [Mugdock Wood, near Milngavie, Stirlingshire. Adult. EMM110:252]
- 08B: 7 August 1971 [Glen Affric, Inverness-shire. Nymphs reared in culture. PTBENHS4:98]

#### Aradus cinnamomeus Panzer (Aradidae)

- 01B: 9 January 1952 [Horsell Common, Woking, Surrey. Macropterous males and brachypterous females. EMM88:106]
- 01F: 27 January 1953 [Young pine plantation, Ashurst Walk, on eastern fringe of the New Forest. Nymphs. EMM89:105]
- 02F: 28 February 1952 [Burnham Beeches, Buckinghamshire. Macropterous males and brachypterous females. EMM88:106]

- 04B: 8 April 1952 [Ash Vale, Surrey. Brachypterous female. EMM88:184] 10 April 1953 [Oxshott, Surrey. Nymphs. EMM89:216] 7 April 1952 [Wisley Common, Surrey. Brachypterous female. EMM88:184]
- 04C: 12 April 1952 [Opposite Kingswood Church, Walton Heath, Surrey. Brachypterous females. EMM88:139] 14 April 1952 [Walton Heath, Surrey. Brachypterous females and macropterous male. EMM88:139]
- 04E: 24 April 1952 [Crowthorne, Berkshire. Brachypterous female. EMM88:184]
- 05B: 10 May 1953 [Oxshott, Surrey. Nymphs. PTSLENHS1953-54:6]
- 05F: 27 May 1952 [Outskirts of Caesar's Camp, near Aldershot, Hampshire. Macropterous male. EMM88:184]
- 06E: 24 June 1997 [Cuckoo Hill, Surrey. EMM134:265-266]
- 07B: 9 July 1950 [Byfleet, Surrey. Brachypterous females. EMM87:285-286]
- 07C: 12 July 1952 [Oxshott Heath and Esher Common, Surrey. Adults. PTSLENHS1952-53:83-84] 12 July 1952 [Oxshott Heath and Esher Common, Surrey. Nymphs. PTSLENHS1952-53:83-84]
- 07F: 28 July 1957 [Oxshott Heath, Surrey. LondonHets] 28 July 1951 [Oxshott, Surrey. Brachypterous female and macropterous male. EMM87:285-286]
- 08A: 2 August 1957 [Oxshott Heath, Surrey. Nymph. LondonHets]
- 08D: 19 August 1995 [Thursley NNR, Surrey. EMM133:175-176]
- 08F: 28 August 1961 [Oxshott Heath, Surrey. Macropterous female. LondonHets]
- 09A: 2 September 2011 [Burnt Platt Wood, near Stoke Row, Oxfordshire Chilterns. BJENH25:115-116] 2 September 1951 [Near the station, Oxshott, Surrey. Males, females (brachypterous and macropterous) and nymphs. EMM87:286] 3 September 1951 [Near Wellington College, Crowthorne, Berkshire. Brachypterous female. EMM87:321]
- 09B: 9 September 1951 [Ash Vale, Surrey. Males, females (brachypterous and macropterous) and nymphs. A pair were *in copula*. EMM87:286]
- 09C: 11 September 1995 [Crooksbury Common. EMM133:175-176] 13 September 1960 [Oxshott Heath, Surrey. LondonHets]

#### Aradus corticalis (Linnaeus) (Aradidae)

10A: 1 October 1951 [Esher Common, Surrey. LondonHets] 1 October 1951 [Oxshott Heath, Surrey. LondonHets]

#### *Aradus depressus* (Fabricius) (Aradidae)

- 02E: 24 February 1952 [Little Chalfont, Buckinghamshire. Nymph. LondonHets] 24 February 1968 [Shoreham, Kent. LondonHets]
- 03B: 7 March 1956 [Esher Common. PTSLENHS1956:69-70] 10 March 2010 [Lincoln, VC53. Hem3:83]
- 04B: 7 April 1999 [Burnbanks, Westmorland. Hem4:151] 8 April 1984 [Farnish Hill, Dillay, Gloucestershire. GloucsHets] 10 April 1944 [Northwood, Middlesex. LondonHets]
- 04E: 24 April 1889 [Catford, Kent. LondonHets]
- 04F: 26 April 1944 [Northwood, Middlesex. LondonHets] 26 April 1951 [The grounds of the Pest Infestation Laboratory, Slough, Buckinghamshire. EMM87:201]
- 05A: 3 May 2014 [Near Slimbridge, Gloucestershire. HN22:8]
- 05B: 8 May 2016 [Constable Doles, East Norfolk. Hem4:39] 7 May 1987 [Oakley Wood, Gloucestershire. GloucsHets] 9 May 1964 [Park Wood, Swanscombe, Kent. LondonHets] 6 May 1953 [Salcey Forest, Northamptonshire. Males. EMM93:49-51]
- 05C: 11 May 1954 [Harpenden. Male. EMM93:121-126] 11 May 2015 [Near Weeting, West Norfolk. Hem4:37] 14 May 1937 [Oxshott Heath, Surrey. LondonHets] 14 May 1921 [Seldson, Surrey. LondonHets] 14 May 1938 [Sheep Leas, Horsley, Surrey. LondonHets] 12 May 1951 [The grounds of the Pest Infestation Laboratory, Slough, Buckinghamshire. EMM87:201]
- 05D: 17 May 1937 [Ealing, Middlesex. Male. Ent71:148-153]
- 05E: 23 May 1985 [Blackstable Wood, Gloucestershire. GloucsHets] 25 May 1953 [Bookham Common, Surrey. LondonHets] 24 May 1920 [Boxhill, Surrey. LondonHets] 24 May 1890

- [Chingford, Epping Forest, Essex. LondonHets] 25 May 1893 [Wimbledon Common, Surrey. LondonHets]
- 05F: 29 May 1949 [Arbrook Common, Surrey. LondonHets] 27 May 1950 [Church Woods, Blean, Kent. EMM86:224] 26 May 1963 [Enfield Chase, Middlesex. LondonHets] 30 May 1963 [Over Tabley, near Mere, Cheshire. Nymph. EMM99:81] 26 May 1926 [Seldson, Surrey. LondonHets] 26 May 2001 [Swinton, VC63. HN7:15]
- 06A: 1 June 2004 [Burnbanks, Westmorland. Hem4:151] 5 June 1937 [Delamere, Cheshire. Adult. EMM99:81] 5 June 1993 [Hailey Wood, Gloucestershire. GloucsHets] 4 June 1904 [Wickham Wood, Kent. LondonHets]
- 06B: 9 June 1963 [Challock, Kent. PTSLENHS1963Part1:67] 7 June 1941 [East Malling, Kent. EMM96:7]
- 06C: 11 June 1939 [Bookham Common, Surrey. LondonHets]
- 06D: 17 June 1949 [Boxhill, Surrey. LondonHets] 17 June 1906 [Chesham, Buckinghamshire. LondonHets] 20 June 1953 [Riddlesdown, Surrey. LondonHets] 17 June 1951 [Westerham, Kent. PTSLENHS1951-52:72-73]
- 06E: 21 June 1964 [Close to the shores of Loch Rannoch, at the western end of the Black Wood of Rannoch, Perthshire. Adults. EMM110:252] 25 June 2013 [Low Scrubs, Coombe Hill, Wendover, Buckinghamshire. Hem1:30]
- 06F: 26 June 1955 [Stoke Common, Buckinghamshire. LondonHets] 30 June 1946 [Totteridge, Hertfordshire. LondonHets]
- 07A: 4 July 1965 [Knowle Park, Kent. PTSLENHS1965:59-60]
- 07B: 7 July 2013 [Near Marcham, Watsonian Berkshire. Hem1:30]
- 07F: 27 July 2017 [Hatfield Forest, North Essex. Hem5:154] 31 July 2009 [Millfield Wood, High Wycombe, Buckinghamshire. Hem1:30]
- 08A: 2 August 1903 [Darenth Wood, Kent. LondonHets]
- 09D: 20 September 1903 [Darenth Wood, Kent. LondonHets] 17 September 1937 [Epping Forest, Essex. LondonHets] 19 September 1937 [Epping Forest, Essex. LondonHets]

#### **Detailed records**

#### Aneurus avenius (Dufour) (Aradidae)

- Under bark of posts in a garden [Fiddler's Elbow, near Monmouth, Monmouthshire. 23 April 1944. EMM91:143]
- Under the bark of a Willow log [Woodmancote, Gloucestershire. 21 April 2011. HN17/18:21]
- Sweeping in a clearing [Homefield Wood, Medmenham, Buckinghamshire. 22 May 2010. Hem1:30]
- Beneath bark of Common Maple [Monk's Wood, Huntingdonshire. 31 May 1952. Adult and nymphs. EMM88:162]
- Sweeping the verge of a wide ride [Hawkhill Inclosure, near Brockenhurst, New Forest. 25 June 2011. Hem1:30]
- Under bark of sallow (*Salix caprea* L.) posts [Priory Grove Wood, near Monmouth, Monmouthshire. 4 July 1944. EMM91:143]
- Under the bark of dead branches of alder and birch [Old Tinworks, Kidwelly, Carmarthenshire. 23 August 1961. Adults and nymphs. EMM97:200]
- On accumulation of logs and tree trunks deposited by river [Afon Llynfi, Breconshire. July 2007. Hem4:151]
- In an emergence bag on a dead hornbeam log [Balls Wood, Hertfordshire. May 2016. Adult male. Hem3:130]
- In a dead hornbeam branch [Bencroft Wood, Broxbourne Woods complex, Hertfordshire. October 2015. Adult female. Hem3:130]
- Under elder bark [Darenth Wood, Kent. 1959. LondonHets]
- In dead hornbeam branches [Hoddesdon Park Wood, Broxbourne Woods complex, Hertfordshire. May 2016. Adult males. Hem3:130]
- Under ash bark infested with the fungus *Daldinia concenterica* [Moore Wood, Castor Hanglands, Peterborough district, Northamptonshire. EG20:125-135]

Beating a dead hazel branch, about three inches in diameter, in an old orchard [Sandy Smith Nature Reserve, Chicksands, Bedfordshire. 2011. Adults and nymphs. HN22:7] Beating old wattle fencing [Wivelsfield, Sussex. Mid-September 1928. EMM65:91-93]

#### Aneurus laevis (Fabricius) (Aradidae)

Under the bark of a dead oak, 30cm diameter, in mixed oak/hornbeam woodland [Yorkletts, near Whitstable, Kent. 5 January 1964. Adults. EMM110:121]

Under bark on dead Salix [Speech House, Dean, Gloucestershire. 8 March 1992. GloucsHets]

Under bark [Effingham, Surrey. 18 April 1953. LondonHets]

Under bark [Windlesham, Surrey. 18 April 1960. LondonHets]

In log piles [Ham Street Wood NNR, West Kent. 23 April 2004. Adults and nymphs. HN3:6]

Under bark of fallen oak limbs in an oak wood [Church Woods, Blean, Kent. 27 May 1950. EMM86:224]

Under the bark of a dead tree [Padworth, Berkshire. 3 July 2015. BJENH29:69-88]

Oak coppice pole [Chedworth Woods, Gloucestershire. 4 December 1983. GloucsHets]

In pine forest [Brownsea Island, Poole Harbour, Dorset. June 2006 - October 2007. EG60:37-71]

Beneath the loose bark of a fallen oak [Chopwell, County Durham. Adults and nymphs. ERJV27:67-68]

Under the bark of old logs of Aspen (Populus tremula) [Danemead NR, Broxbourne, Hertfordshire. Early June. HN8:12]

Under elder bark [Darenth Wood, Kent. 1959. LondonHets]

Under bark on moss-covered branches of oak sapling [Hartlebury Common LNR, Worcestershire. 1992 and 1993. Nymphs and adults. EMM133:17-26]

#### Aneurus laevis/avenius AMBIGUOUS (Aradidae)

Under oak bark [Darenth Wood, Kent. 21 August 1904. PSLENHS1904:75]

Under bark on mossy stump [Ruislip Wood, Middlesex. 10 November 1882. LondonHets]

In moss and on old tree stumps [Bentley Woods, Suffolk. March 1895. SuffolkHets]

Beating a hedge [Near Faversham, Kent. September 1892. EMM40:100-103]

In a sand pit [Near Hastings. May 1881. EMM18:40]

#### *Aradus aterrimus* Fieber (Aradidae)

Sitting on the cut surface of a chestnut coppice stool [Bysing Wood, near Faversham, Kent. 7 April 2015. BJENH28:128]

Sweeping a flowery road verge [A27 just west of Arundel, Sussex. 30 April 1977. EMM113:120] Among chips on the stump of a felled oak [Darenth Wood, Kent. 30 May 1861. Female. D&S1865]

Amongst rotting, fungus-covered sacking in a wood, left by charcoal burners [Near East Malling, Kent. 26 November 1933. Nymph reared in culture. EMM71:41]

Amongst chippings of chestnut stumps [Blean Woods. ERJV81:160-163]

In corrugated cardboard bands place as traps around the stems of apple trees [East Malling, Kent. Nymph reared in culture. EMM71:41]

In wood shavings and chips found in recently cut-down chestnut woods [Malling district of Kent. PTSLENHS1949-50:38]

In a heap of hedge brushings [Near East Malling, Kent. July 1934. Adult female. EMM71:41]

Amongst rotting, fungus-covered sacking in a wood, left by charcoal burners [Near East Malling, Kent. Until the first week of October 1934. Adults and nymphs. EMM71:41]

Amongst rotting, fungus-covered sacking in a wood, left by charcoal burners [Near East Malling, Kent. The following week (October 1934). EMM71:41]

In wood chips left by wood-cutters when the chestnuts were cut down in the winter of 1959-60 [Oaken Wood, East Malling, Kent. Spring 1961. PTSLENHS1961:8]

In piles of Sweet Chestnut chippings [Several localities in Kent. EMM113:120]

Aradus betulae (Linnaeus) (Aradidae)

From fungusy birch stumps [Close to the shores of Loch Rannoch, at the western end of the Black Wood of Rannoch, Perthshire. 21 June 1964. Adults. EMM110:252]

Under bark of an old birch on the edge of a birch wood [Near Camaghouran, Rannoch, Perthshire. 10 July 1921. EMM57:227-229]

Found in the fungus *Piptoporus betulinus* on an old birch trunk and under bark close by [Boat of Garten, Inverness. 5 August 1987. BJENH2:54]

From a dead birch in a boggy oak wood [Mugdock Wood, near Milngavie, Stirlingshire. 1 August 1974. Adult. EMM110:252]

Woodlouse ate a nymph in culture [Glen Affric, Inverness-shire. 7 August 1971. Nymphs reared in culture. PTBENHS4:98]

Under loose bark of an old birch stump [Glen Affric, Inverness-shire. June 1970. Nymphs reared in culture. PTBENHS4:16]

Under the bark of a birch log [Knockinfin Farm, near Tomich, East Inverness-shire. Nymphs. EMM98:264]

Under the bark of a dead standing alder [Near Guishachen, East Inverness-shire. Dead adult. EMM98:264]

Under birch bark [Near Guishachen, East Inverness-shire. Nymph. EMM98:264]

#### Aradus cinnamomeus Panzer (Aradidae)

Beneath the bark of young Scots pine [Horsell Common, Woking, Surrey. 9 January 1952. Macropterous males and brachypterous females. EMM88:106]

Beneath the bark of a young Scots pine [Young pine plantation, Ashurst Walk, on eastern fringe of the New Forest. 27 January 1953. Nymphs. EMM89:105]

Superficial examination under the bark of two young pines [Burnham Beeches, Buckinghamshire. 28 February 1952. Macropterous males and brachypterous females. EMM88:106]

On a pine tree, less than 15 years old [Ash Vale, Surrey. 8 April 1952. Brachypterous female. EMM88:184]

On a small pine tree, 30 inches high [Wisley Common, Surrey. 7 April 1952. Brachypterous female. EMM88:184]

Beneath the bark of young Scots pine [Opposite Kingswood Church, Walton Heath, Surrey. 12 April 1952. Brachypterous females. EMM88:139]

Beneath the bark of young Scots pine [Walton Heath, Surrey. 14 April 1952. Brachypterous females and macropterous male. EMM88:139]

Beating the roots of heather overhanging a sandbank, near pine trees [Crowthorne, Berkshire. 24 April 1952. Brachypterous female. EMM88:184]

Beneath the bark of a young Scots pine [Outskirts of Caesar's Camp, near Aldershot, Hampshire. 27 May 1952. Macropterous male. EMM88:184]

Under pine bark [Cuckoo Hill, Surrey. 24 June 1997. EMM134:265-266]

Beating Scots pine [Byfleet, Surrey. 9 July 1950. Brachypterous females. EMM87:285-286]

On firs [Oxshott Heath and Esher Common, Surrey. 12 July 1952. Adults. PTSLENHS1952-53:83-84]

Under the scales of fir boles [Oxshott Heath and Esher Common, Surrey. 12 July 1952. Nymphs. PTSLENHS1952-53:83-84]

From beneath the bark of the trunk of a young Scots pine [Oxshott, Surrey. 28 July 1951. Brachypterous female and macropterous male. EMM87:285-286]

Under pine bark [Thursley NNR, Surrey. 19 August 1995. EMM133:175-176]

Sweeping in hot sunshine [Oxshott Heath, Surrey. 28 August 1961. Macropterous female. LondonHets]

Sweeping along the edges of the main ride of a wood, in an area of Scots pines, along the side of a felled pine [Burnt Platt Wood, near Stoke Row, Oxfordshire Chilterns. 2 September 2011. BJENH25:115-116]

Beating and examining a damaged Scots pine [Near the station, Oxshott, Surrey. 2 September 1951. Males, females (brachypterous and macropterous) and nymphs. EMM87:286]

Beating young Scots pine [Ash Vale, Surrey. 9 September 1951. Males, females (brachypterous and macropterous) and nymphs. A pair were *in copula*. EMM87:286]

On young pines [Studland Heath, Dorset. 13-27 August 1955. EMM91:282-283]

Aradus corticalis (Linnaeus) (Aradidae)

On a fungus-grown beech stump [Near Brockenhurst, New Forest. June 1883. Adult and nymph. EMM20:86]

Aradus depressus (Fabricius) (Aradidae)

Under a stone [Shoreham, Kent. 24 February 1968. LondonHets]

On or amongst the fungus *Polystictus versicolor* Fr. on stumps [Esher Common. 7 March 1956. PTSLENHS1956:69-70]

In a light trap [The grounds of the Pest Infestation Laboratory, Slough, Buckinghamshire. 26 April 1951. EMM87:201]

Sweeping roadside herbage [Near Slimbridge, Gloucestershire. 3 May 2014. HN22:8]

Under loose bark on a dead standing old beech [Oakley Wood, Gloucestershire. 7 May 1987. GloucsHets]

In wood [Park Wood, Swanscombe, Kent. 9 May 1964. LondonHets]

In a suction trap [Harpenden. 11 May 1954. Male. EMM93:121-126]

In a light trap [The grounds of the Pest Infestation Laboratory, Slough, Buckinghamshire. 12 May 1951. EMM87:201]

Crawling on a fence. In culture observed inserting stylets into white fungal hyphae from rotten wood, but did not appear to push them along the length of the hyphae. They were extended about 3mm beyond the tip of the labium [Ealing, Middlesex. 17 May 1937. Male. Ent71:148-153]

Sweeping [Chingford, Epping Forest, Essex. 24 May 1890. LondonHets]

On birch [Wimbledon Common, Surrey. 25 May 1893. LondonHets]

Under bark of fallen oak limbs in an oak wood [Church Woods, Blean, Kent. 27 May 1950. EMM86:224]

Working dead birch logs [Over Tabley, near Mere, Cheshire. 30 May 1963. Nymph. EMM99:81]

In flight [Hailey Wood, Gloucestershire. 5 June 1993. GloucsHets]

Under bark [Wickham Wood, Kent. 4 June 1904. LondonHets]

Massed flights circling around the stump of a cut-down birch, exuding much sap [East Malling, Kent. 7 June 1941. EMM96:7]

From fungusy birch stumps [Close to the shores of Loch Rannoch, at the western end of the Black Wood of Rannoch, Perthshire. 21 June 1964. Adults. EMM110:252]

Sweeping along a path [Low Scrubs, Coombe Hill, Wendover, Buckinghamshire. 25 June 2013. Hem1:30]

On birch [Stoke Common, Buckinghamshire. 26 June 1955. LondonHets]

Sweeping along a public footpath [Near Marcham, Watsonian Berkshire. 7 July 2013. Hem1:30]

Under bark of large log [Hatfield Forest, North Essex. 27 July 2017. Hem5:154]

In a moss-covered tree stump with abundant fungal fruiting bodies [Millfield Wood, High Wycombe, Buckinghamshire. 31 July 2009. Hem1:30]

In dried sticks [Darenth Wood, Kent. 2 August 1903. LondonHets]

Beating very old and rotting faggots [Darenth Wood, Kent. 20 September 1903. LondonHets]

On accumulation of logs and tree trunks deposited by a river [Afon Llynfi, Breconshire. July 2007. Hem4:151]

On oak [Assington Thicks, Suffolk. SuffolkHets]

On fir trees while the timber was being felled; and in moss and among pine chips [Bentley Woods, Suffolk. SuffolkHets]

Flew into a garden [Bodmin, Cornwall. Spring 2004. CornwallHets]

Beneath willow bark [Cheshunt, Hertfordshire. LondonHets]

On the outside wall of a house at night [Co Carlow. 2015. HN23:13]

Under bark [Darenth. PSLENHS1903:63]

Massed flights in the afternoon and early evening, to and from the stump of a cut-down oak, which was exuding a considerable quantity of sap [East Malling, Kent. Early July 1959. Macropter. EMM96:7]

Under bark on an old oak stump [Gomshall, Surrey. August 1900. Nymphs and adults. Butler1923] Flying in the sunshine [In the Birmingham district. First four months of 1883. EMM20:19] In a sand pit [Near Hastings. May 1881. EMM18:40]

Under bark of oak stumps [New Forest. July 1904. ERJV17:67]

Under loose bark on a dead standing old beech [Oakley Wood, Gloucestershire. April 1988. GloucsHets]

In a suction trap [Rothamsted Experimental Station, Harpenden. Male and female. TRESL112:173-220]

On logs in a garden [Tadworth, Surrey. Circa 1960. LondonHets]

On horse radish (Armoracia rusticana) [The grounds of the Pest Infestation Laboratory, Slough, Buckinghamshire. June 1950. EMM87:103]

Alighted on the recorder's wife [The Meads NR, Hertford/Ware, Hertfordshire. Late April. HN8:12]

Under the bark of a fungus-infested birch stump [Tomlich, Strath Glass, Inverness-shire. End of June 1964. Adults and nymphs. EMM100:147]

On oak stump [Walthamstow, Essex. LondonHets]

Sweeping in a wood [Where the Denagh River flows from Lough Leane, Ireland. IrelandHets] Under bark [Woodford, South Galway. August 1901. Nymph. IrelandHets]

#### **Bibliography**

Aneurus avenius (Dufour) (Aradidae)

as A. avenius EMM81:253-273

as Aneur. avenius EMM91:7-27

as Aneurus avenicus EMM65:91-93

as Aneurus avenius BJENH31:118, Butler1923, EG20:125-135, EMM110:121, EMM151:176, EMM51:16-17, EMM88:162, EMM91:143, EMM92:54-64, EMM93:49-51, EMM97:200, Ent58:18, ERJV27:67-68, GloucsHets, HantsHets, Hem1:2, Hem1:26, Hem1:30, Hem1:40, Hem1:41, Hem1:93, Hem2:30, Hem3:1, Hem3:100, Hem3:103, Hem3:130, Hem3:39, Hem3:92, Hem4:1, Hem4:101, Hem4:130, Hem4:151, Hem4:26, Hem4:67, Hem5:1, Hem5:101, Hem5:119, Hem5:14, Hem5:148, Hem5:155, Hem5:191, Hem5:25, Hem5:39, Hem5:53, Hem6:235, Hem6:4, HN17/18:21, HN22:7, HSGN13:11, LondonHets, PTSLENHS1952-53:79, PTSLENHS1956:111-136, PTSLENHS1962:123-183, S&L1959, TSBE11:245-280

Aneurus laevis (Fabricius) (Aradidae)

as A. laevis EMM81:253-273, EMM82:94-95

as Aneur. laevis EMM91:7-27

as Aneurus laevis BJENH19:189, BJENH29:69-88, Butler1923, EG20:125-135, EG60:37-71, EMM110:121, EMM133:17-26, EMM51:16-17, EMM69:234-245, EMM86:224, Ent58:18, ERJV27:67-68, GloucsHets, HantsHets, Hem1:2, Hem1:40, Hem1:41, Hem1:93, Hem2:30, Hem2:40, Hem3:1, Hem3:103, Hem3:39, Hem3:74, Hem4:101, Hem4:130, Hem4:144, Hem4:147, Hem4:67, Hem5:1, Hem5:101, Hem5:119, Hem5:135, Hem5:14, Hem5:191, Hem5:25, Hem5:39, Hem5:53, Hem5:69, Hem5:92, Hem6:4, HN3:6, HN8:12, JSBE5:179-186, LondonHets, PTSLENHS1953-54:77-78, PTSLENHS1956:111-136, PTSLENHS1962:123-183, S&L1959, TRESL103:171-218, TSBE11:245-280

Aneurus laevis/avenius AMBIGUOUS (Aradidae)

as *Aneurus laevis* D&S1865, EMM18:40, EMM40:100-103, Ent37:292, ERJV18:158-159, LondonHets, PSLENHS1904:75, Saunders1892, SuffolkHets, Synopsis1875

#### Aradus aterrimus Fieber (Aradidae)

as *A. aterrimus* EMM81:253-273

as Ar. aterrimus EMM91:7-27

as *Aradus aterrimus* BJENH28:128, Butler1923, D&S1865, EMM113:120, EMM57:227-229, EMM71:41, EMM71:41-42, EMM87:285-286, EMM98:111-112, ERJV81:160-163, HantsHets, Hem1:2, Hem1:40, Hem1:41, Hem1:93, Hem3:1, Hem4:1, Hem4:130, Hem4:26, Hem4:39, Hem4:67, Hem5:1, Hem5:101, Hem5:39, Hem5:53, Hem6:260, Hem6:272, Hem6:4, HN4:9, HSGN1:4, HSGN8:8, JSBE5:179-186, LondonHets, PTSLENHS1949-50:38, PTSLENHS1961:8, PTSLENHS1962:123-183, S&L1959, Saunders1892, Synopsis1875, TSBE11:245-280

#### Aradus betulae (Linnaeus) (Aradidae)

as *A. betulae* EMM81:253-273

as Ar. betulae EMM91:7-27

as *Aradus betulae* BJENH2:54, BJENH7:174-175, Butler1923, EMM100:147, EMM110:252, EMM57:227-229, EMM87:285-286, EMM98:264, HantsHets, Hem1:2, Hem1:40, Hem1:41, Hem1:93, Hem3:1, Hem4:1, Hem4:67, Hem5:1, Hem5:101, Hem5:158, Hem6:5, HSGN1:18, HSGN1:4, HSGN12:11, HSGN12:13, HSGN8:8, PTBENHS4:16, PTBENHS4:7, PTBENHS4:98, S&L1959

#### Aradus cinnamomeus Panzer (Aradidae)

as Ar. cinnamomeus EMM91:7-27

as *Aradus cinnamomeus* BJENH25:115-116, BJENH29:43-44, EcolEnt8:229-232, EMM130:77-79, EMM133:175-176, EMM134:265-266, EMM87:259, EMM87:285-286, EMM87:286, EMM87:288, EMM87:321, EMM87:328, EMM88:106, EMM88:139, EMM88:184, EMM88:184, EMM89:105, EMM89:216, EMM91:282-283, EMM94:171-172, Ent89:223-231, Ent95:137-143, Hem1:2, Hem1:30, Hem1:40, Hem1:41, Hem1:93, Hem3:1, Hem3:39, Hem4:1, Hem4:67, Hem5:1, Hem5:101, Hem5:191, Hem5:53, Hem6:5, HSGN1:4, HSGN13:11, LondonHets, PRESL(A)38:15-22, PTSLENHS1951-52:13, PTSLENHS1951-52:18, PTSLENHS1951-52:34, PTSLENHS1952-53:83-84, PTSLENHS1953-54:6, PTSLENHS1956:111-136, S&L1959, TSBE16:1-48

#### Aradus corticalis (Linnaeus) (Aradidae)

as A. corticalis EMM81:253-273

as Ar. corticalis EMM91:7-27

as *Aradus corticalis* Butler1923, D&S1865, EMM110:252, EMM14:59-60, EMM20:86, EMM57:227-229, EMM69:234-245, EMM87:285-286, HantsHets, Hem1:2, Hem1:40, Hem1:41, Hem1:93, Hem3:1, Hem3:39, Hem4:1, Hem4:130, Hem4:67, Hem5:1, Hem5:101, Hem5:158, Hem5:39, Hem5:53, Hem6:235, Hem6:5, HN4:9, HN9:2, HSGN1:4, HSGN8:8, LondonHets, PTSLENHS1962:123-183, S&L1959, Saunders1892, Synopsis1875, TSBE11:245-280

#### Aradus depressus (Fabricius) (Aradidae)

as A. depressus EMM81:253-273, EMM82:94-95

as Ar. depressus EMM91:7-27

as *Aradus depressus* BJENH18:233-252, BJENH22:61-70, BJENH31:118, Butler1923, CornwallHets, D&S1865, EG20:125-135, EMM100:147, EMM110:252, EMM14:59-60, EMM18:40, EMM20:19, EMM57:227-229, EMM69:234-245, EMM71:41, EMM72:210-219, EMM86:224, EMM87:103, EMM87:201, EMM87:285-286, EMM92:54-64, EMM93:121-126, EMM93:49-51, EMM96:7, EMM99:81, Ent36:325, Ent47:146-147, Ent71:148-153, ERJV17:303, ERJV17:67, ERJV94:155, GloucsHets, HantsHets, Hem1:2, Hem1:30, Hem1:40, Hem1:41, Hem1:93, Hem2:12, Hem2:30, Hem3:1, Hem3:22, Hem3:23, Hem3:39, Hem3:74, Hem3:83, Hem4:1, Hem4:101, Hem4:127, Hem4:130, Hem4:151, Hem4:26, Hem4:37, Hem4:39, Hem4:67, Hem4:85, Hem5:1, Hem5:101, Hem5:119, Hem5:138, Hem5:143, Hem5:148, Hem5:154, Hem5:155, Hem5:159, Hem5:16, Hem5:191, Hem5:25, Hem5:39,

Hem5:53, Hem5:69, Hem5:92, Hem6:276, Hem6:6, HN17/18:26, HN22:8, HN23:13, HN6:2, HN7:15, HN8:12, HN9:5, IrelandHets, JSBE5:179-186, LondonHets, PSLENHS1903:63, PTSLENHS1951-52:72-73, PTSLENHS1956:69-70, PTSLENHS1962:123-183, PTSLENHS1963Part1:67, PTSLENHS1965:59-60, S&L1959, Saunders1892, SuffolkHets, Synopsis1875, TRESL103:171-218, TRESL112:173-220, TSBE1:51-84, TSBE11:245-280

#### **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vicecounty Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above. Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

#### Aneurus avenius (Dufour) (Aradidae)

Common name. The Common Barkbug.

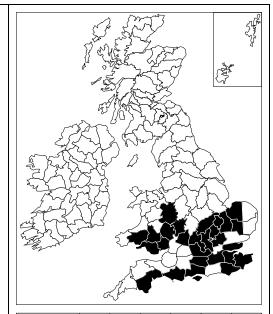
First report. EMM51:16-17 as Aneurus avenius.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily from under the bark of trees, living or dead (logs, branches or posts), specifically willow, maple (n), sallow, alder (n), birch (n), elder and ash. It has also been taken sweeping in woodland (clearing and ride), beating hazel (n) and wattle fencing, and in an emergence bag on a dead hornbeam log.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February				1		
March	1					1
April					2	
May	2	1	1		1	1 N
June		1			2	
July	1					
August	1	1			1 N	
September		1				1
October						
November						
December	1					



#### Aneurus laevis (Fabricius) (Aradidae)

Common name. The Scarce Barkbug.

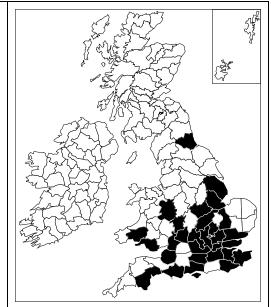
First report. D&S1865 as Aneurus laevis.

Ambiguities. Prior to EMM51:16-17 records may refer to *Aneurus avenius* (Hem5:14-15).

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily from under the bark of trees, standing (dead (w) or alive (n)), fallen (trees and limbs) (n), and logs (n); most frequently oak (w, n), but also Salix (w), aspen or elder. Also taken from an oak coppice pole and in a pine forest.



	1-5	6-10	11-15	16-20	21-25	26-
January	1	1				
February						
March		1				
April	2			2	2 N	
May	1	1		1		2
June		1				
July	1					
August						
September		1				
October						1
November	2					
December	1					

No habitus images are available.

#### Aradus aterrimus Fieber (Aradidae)

Common name. The Chestnut Flatbug.

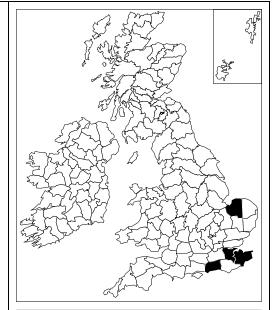
First report. D&S1865 as Aradus aterrimus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily in association with chestnut, with one record for oak, in the shavings and chips from cut down trees, and on a stump. Also taken sweeping a flowery road verge, in fungus-covered sacking in a wood (n), in cardboard bands around the bases of apple trees (n), and in a heap of hedge brushings.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April		1				1
May						1
June						
July						
August						
September						
October						
November						N
December						

No habitus images are available.

#### Aradus betulae (Linnaeus) (Aradidae)

Common name. The Birch Flatbug.

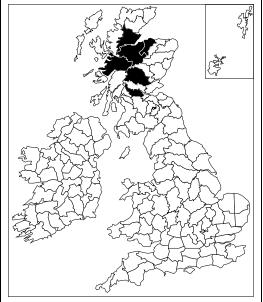
First report. EMM57:227-229 as Aradus betulae.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily from birch (living, dead, stumps (n), logs (n)), frequently stated from under the bark (n), with one record from within fungus growing on the tree. There is a record from under the bark of a dead standing alder. In culture, a nymph was eaten by a woodlouse.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June					1	
July		1			1	1
August	2	N				
September						
October						
November						
December						

No habitus images are available.

#### Aradus cinnamomeus Panzer (Aradidae)

Common name. The Pine Flatbug.

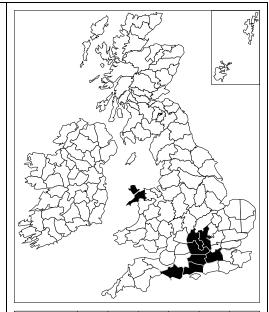
First report. EMM87:285-286 as Aradus cinnamomeus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from, or in the vicinity of, pine trees: beating the trees (n); under bark (w, n); in the scales of boles (n); beating the roots of heather; and sweeping a woodland ride



	1-5	6-10	11-15	16-20	21-25	26-
January		1				N
February						1
March						
April		2 N	2		1	
May		N				1
June					1	
July		1	1 N			2
August	N			1		1
September	3 N	1 N	2			
October						
November						
December						



# Aradus corticalis (Linnaeus) (Aradidae) Common name. The Scarce Flatbug. First report. D&S1865 as Aradus corticalis. Ambiguities. None reported. Geographical distribution. See vice-county map opposite. Seasonal distribution. See heximonth calendar opposite. Other details. Reported on a fungus-grown beech stump (n).

	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June						
July						
August						
September						
October	2					
November						
December						

October 2 November December December December No habitus images are available.

#### Aradus depressus (Fabricius) (Aradidae)

Common name. The Common Flatbug.

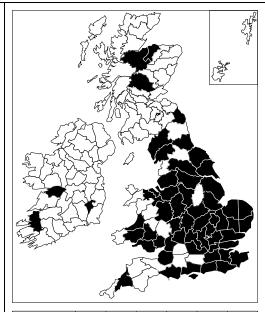
First report. D&S1865 as Aradus depressus.

Ambiguities. None reported.

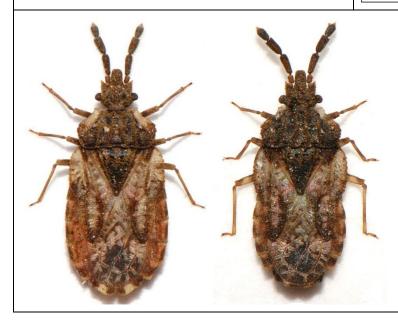
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily from dead trees, on or under the bark of standing trees, fallen limbs, stumps (n), logs (n), fencing, sticks, chips and faggots. Reported tree species include oak (n), birch (n), pine, beech and willow, with some records mentioning fungus (w). The bug has been taken sweeping, from under a stone (w), in a light trap and in a suction trap. The bug has been observed in flight, including massed flights around the sappy stumps of recently cut-down trees. In culture, the bug was observed inserting stylets into the white fungal hyphae from rotten wood.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February					1 N	
March		2				
April		3			1	2
May	1	4	6	1	5	5 N
June	4	2	1	4	2	2
July	1	1				2
August	1					
September				3		
October						
November						
December						



# A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (3) THE FAMILY ACANTHOSOMATIDAE

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#### Introduction

This is the third part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Acanthosomatidae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

#### **Heximonth records**

Acanthosoma haemorrhoidale (Linnaeus) (Acanthosomatidae)

01C: 14 January 1998 [Bo'ness, VC84. BJENH27:81-91] 13 January 2004 [Cross park, Cardinham, Cornwall. CornwallHets] 11 January 2006 [Harestanes Countryside Visitors Centre, VC80. BJENH27:81-91]

01D: 17 January 1992 [Crieff, VC88. BJENH27:81-91]

01E: 25 January 1998 [Birkhill, VC84. BJENH27:81-91]

01F: 28 January 2006 [Dean Castle Country Park, VC75. BJENH27:81-91] 29 January 1927 [St Ann's, Co Dublin. IrelandHets]

02C: 15 February 2000 [Lauriston Castle, Edinburgh, VC83. BJENH27:81-91]

02D: 16 February 1997 [Glen Chalmadale, Isle of Arran, VC100. BJENH27:81-91] 20 February 1943 [Rendcomb, Gloucestershire. GloucsHets]

02E: 23 February 1899 [Brixton, Surrey. LondonHets] 21 February 1997 [Glen Chalmadale, Isle of Arran, VC100. BJENH27:81-91] 23 February 1996 [Kelvingrove Park, Glasgow, VC77. BJENH27:81-91]

03C: 15 March 1991 [Silk Wood, Westonbirt, Gloucestershire. GloucsHets] 14 March 1991 [Wenchford Dean, Gloucestershire. GloucsHets]

03D: 16 March 2001 [Lauriston Castle, Edinburgh, VC83. BJENH27:81-91]

03E: 22 March 1992 [Bearsden, Glasgow, VC99. BJENH27:81-91] 25 March 1998 [Bo'ness, VC84. BJENH27:81-91] 23 March 1991 [Popes Wood, Gloucestershire. GloucsHets]

- 03F: 26 March 1893 [Phoenix Park, Co Dublin. IrelandHets]
- 04A: 3 April 2007 [Aberdeen, VC92. BJENH27:81-91] 5 April 1979 [Kirkconnell Flow, VC73. BJENH27:81-91] 5 April 2001 [Lochend, Edinburgh, VC83. BJENH27:81-91] 4 April 1999 [N. Merchinston Cemetery, Edinburgh, VC83. BJENH27:81-91]
- 04B: 6 April 1940 [Oxshott Common, Surrey. LondonHets] 6/7 April 1985 [Sheffield. PTBENHS18:79]
- 04C: 12 April 1993 [Clarkston, Glasgow, VC76. BJENH27:81-91] 13 April 2005 [Coldingham, Eyemouth, VC81. BJENH27:81-91] 15 April 1997 [Lochranza, Isle of Arran, VC100. BJENH27:81-91] 14 April 1999 [Pilrig Park, Edinburgh, VC83. BJENH27:81-91] 13 April 1945 [Woodcock Wood, Fancott, Bedfordshire. EMM86:6-8]
- 04D: 17 April 1954 [Boxhill, Surrey. PTSLENHS1954-55:77-78] 16 April 2000 [Polkemmet Country Park, Whitburn, VC84. BJENH27:81-91] 16 April 1996 [South of Bonskeid, VC88. BJENH27:81-91]
- 04E: 21 April 2005 [Dean Castle Country Park, VC75. BJENH27:81-91] 24 April 1999 [Woolbury Ring, VC12. Hem3:103]
- 04F: 28 April 1893 [Bagley Wood, near Oxford, VC22. EMM29:191-192] 29 April 2007 [Hyndland, Glasgow, VC77. BJENH27:81-91] 28 April 1899 [Kilderry, Londonderry. IrelandHets]
- 05A: 3 May 1957 [Clifton Downs, Gloucestershire. GloucsHets] 1 May 1929 [Epping Forest, Essex. LondonHets] 5 May 1921 [Shirley, Surrey. LondonHets]
- 05B: 10 May 1988 [Dumfries, VC72. BJENH27:81-91] 9 May 1953 [Epping Forest, Essex. LondonHets] 8 May 1996 [Hailes Mill, East Linton, VC82. BJENH27:81-91]
- 05C: 12 May 1951 [Ashtead Woods, Surrey. LondonHets] 11 May 1951 [Hodgemoor Wood, Chalfont St Giles, Buckinghamshire. LondonHets]
- 05D: 19 May 2001 [Calton Hill, Edinburgh, VC83. BJENH27:81-91] 19 May 1997 [Chadach Sawmill, Isle of Arran, VC100. BJENH27:81-91] 17 May 1976 [Dagnam Park, Essex. LondonHets] 16 May 1895 [Highams Park, Walthamstow, Essex. LondonHets] 19 May 2001 [Lochend, Edinburgh, VC83. BJENH27:81-91] 16 May 1931 [St Martha's, Chilworth, Surrey. PSLENHS1931-32:56]
- 05E: 24 May 1930 [Boxhill, Surrey. LondonHets] 24 May 1953 [Claygate, Surrey. LondonHets] 25 May 1958 [Cuffley Great Wood, near Cheshunt, Hertfordshire. LondonHets] 21 May 1960 [Kinloch, VC104. BJENH27:81-91] 25 May 2007 [Newmilns, VC75. BJENH27:81-91] 22 May 2001 [Pilrig Park, Edinburgh, VC83. BJENH27:81-91]
- 05F: 30 May 1954 [Banstead Downs, Surrey. LondonHets] 29 May 1999 [Figgate Burn Park, Edinburgh, VC83. BJENH27:81-91] 27 May 2000 [Headley, Surrey. LondonHets] 29 May 1905 [Mickleham Downs, Surrey. LondonHets] 31 May 1952 [Monk's Wood, Huntingdonshire. EMM88:162] 29 May 1999 [Portobello, Edinburgh, VC83. BJENH27:81-91] 29 May 1997 [Ralston, Paisley, VC76. BJENH27:81-91] 28 May 1982 [Torrs Warren, VC74. BJENH27:81-91]
- 06A: 4 June 1991 [Auchincruive, VC75. BJENH27:81-91] 4 June 1905 [Boxhill, Surrey. LondonHets] 5 June 1962 [Coulsdon, Surrey. LondonHets] 1 June 1942 [Daglingworth, Gloucestershire. GloucsHets] 3 June 2005 [Dean Castle Country Park, VC75. BJENH27:81-91] 1 June 1932 [Epping Forest, Essex. LondonHets] 2 June 1991 [Swifts Hill, Gloucestershire. GloucsHets] 4 June 1951 [West Wickham, Kent. LondonHets]
- 06B: 9 June 1979 [The Warrens, near South Cave, VC61. Hem4:146]
- 06C: 11 June 2001 [Dalry Community Park, Edinburgh, VC83. BJENH27:81-91] 12 June 1996 [Kirkconnell Flow NNR, VC73. BJENH27:81-91] 13 June 1986 [Oxleas Wood SSSI, Shooters Hill, London. ERJV99:83] 12 June 1988 [Rendcomb Park, Gloucestershire. GloucsHets]
- 06D: 17 June 1983 [Chalk Lane, The King's Forest, VC26. Hem4:17] 16 June 1983 [Croxton, VC28. Hem4:17] 20 June 2005 [Fairlaw, Auchencrow, VC81. BJENH27:81-91] 18 June 1983 [Freshwater, Isle of Wight. BJENH6:77] 16 June 2002 [Lerwick, VC112. BJENH27:81-91] 18 June 2000 [Muiravonside Country Park, VC84. BJENH27:81-91]
- 06E: 21 June 2005 [Grianain Forest, Carradale, VC101. BJENH27:81-91] 25 June 1955 [Wimbledon Common, Surrey. LondonHets]

- 06F: 28 June 1996 [Auchenhew Wood, Isle of Arran, VC100. BJENH27:81-91] 29 June 1999 [Leith-Seafield disused railway, VC83. BJENH27:81-91] 26 June 1996 [Loch carn a'Chuillin, Fort Augustus, VC96. BJENH27:81-91]
- 07A: 5 July 1996 [Falkirk, VC86. BJENH27:81-91]
- 07C: 13 July 1946 [King's Wood, Bedfordshire. EMM86:6-8]
- 07D: 20 July 1955 [Derwenlas, Montgomeryshire. Nymphs. EMM92:54-64] 19 July 1919 [Palmers Green, Middlesex. Nymph. LondonHets] 18 July 1955 [Penparcau, Cardiganshire. Nymphs. EMM92:54-64] 18 July 1992 [Stirling, VC86. BJENH27:81-91]
- 08A: 3 August 2005 [Bo'ness, VC84. BJENH27:81-91] 4 August 2005 [Gifford, VC82. BJENH27:81-91] 2 August [Windsor Forest. Nymphs. Butler1923]
- 08B: 9 August 2015 [Bicester Town Cemetery, Oxfordshire. Nymphs reared in culture. Hem3:126] 10 August 2002 [Bo'ness, VC84. BJENH27:81-91] 10 August 2005 [Lilliesleaf, Melrose, VC80. BJENH27:81-91] 9 August 2001 [Seil, VC98. BJENH27:81-91]
- 08C: 13 August 2006 [Dawsholm Park, Glasgow VC99. BJENH27:81-91] 15 August 2015 [Dunstan Road, Oxford, Oxfordshire. Nymphs reared in culture. Hem3:126] 12 August 1945 [Harlington, Bedfordshire. EMM86:6-8] 11 August 1934 [Ruislip, Middlesex. LondonHets] 15 August 1993 [Sedbury, Gloucestershire. GloucsHets] 15 August 2015 [South Norwood Country Park, London. BJENH29:122-125]
- 08D: 20 August 1894 [Bookham Common, Surrey. LondonHets] 16 August 1980 [Devil's Punchbowl, VC28. Hem4:17] 19 August 1984 [Drymen, Stirlingshire. BJENH5:93-94] 19 August 1988 [Drymen, VC86. BJENH27:81-91] 19 August 1933 [Eynsford, Kent. Adults and nymphs. PTSLENHS1933-34:32-33] 17 August 2005 [Galashiels, VC79. BJENH27:81-91] 19 August 1985 [Near Cinderford, Forest of Dean, Gloucestershire. GloucsHets] 20 August 2014 [St Mary's Church, Oxford. Nymphs reared in culture. Hem2:49]
- 08E: 23 August 1955 [Banstead Downs, Surrey. Nymph. LondonHets] 21 August 2005 [Bo'ness, VC84. BJENH27:81-91] 25 August 1915 [Chenies, Buckinghamshire. Nymphs. LondonHets] 22 August 2007 [Gleninchaquin Park, Beara Peninsula, Co Kerry. HN10:13]
- 08F: 28 August 2004 [Asloun, Alford, VC92. BJENH27:81-91] 30 August 1964 [Blackheath, Kent. LondonHets] 27 August 1950 [Boxhill, Surrey. LondonHets] 28 August 1971 [Hatfield Park, Hertfordshire. PTBENHS4:127-128] 30 August 2006 [Kirktonhill, Dumbarton, VC99. BJENH27:81-91] 28 August 1945 [Purley, Surrey. LondonHets] 26 August 2015 [Sandhouse Lane NR, near Leighton Buzzard, Bedfordshire. Nymphs reared in culture. Hem3:126] 28 August 1995 [Southwick, Mersehead, VC73. BJENH27:81-91] 27 August 1933 [Uxbridge, Middlesex. Ent71:148-153]
- 09A: 4 September 1950 [Amersham, Buckinghamshire. Nymphs. LondonHets] 4 September 1949 [Ash Vale, Surrey. PTSLENHS1949-50:78] 3 September 1993 [Beachley Point, Gloucestershire. GloucsHets] 1 September 1974 [Bourne, VC53. Hem3:83] 3 September 2005 [Corsock, VC73. BJENH27:81-91] 3 September 1944 [Deadmansea Wood, Bedfordshire. EMM86:6-8] 2 September 2007 [Hill of Logie, Ellon, VC93. BJENH27:81-91] 3 September 1989 [Ross Wood, VC86. BJENH27:81-91] 1 September 1961 [Shoreham, Kent. LondonHets]
- 09B: 9 September 2005 [Aboyne, VC92. BJENH27:81-91] 10 September 1995 [Bo'ness, VC84. BJENH27:81-91] 10 September 1944 [Near Houghton Regis, Bedfordshire. EMM81:183-185] 7 September 2006 [Waulkmill Glen, Barrhead, VC76. BJENH27:81-91] 7 September 1991 [Whelford Pools, Gloucestershire. GloucsHets]
- 09C: 13 September 2006 [Aberdeen, VC92. BJENH27:81-91] 15 September 1934 [Boxhill, Surrey. LondonHets] 12 September 1953 [Burford Bridge, Boxhill, Surrey. Adults and nymphs. PTSLENHS1953-54:91-92] 12 September 1934 [Imperial College Biological Field Station, Slough. TSBE2:47-67] 14 September 1984 [Threave, VC73. BJENH27:81-91]
- 09D: 19 September 1995 [Bawsinch, Duddington, Edinburgh, VC83. BJENH27:81-91] 19 September 1991 [Freshwater, Isle of Wight. BJENH6:77] 20 September 1991 [Freshwater, Isle of Wight. BJENH6:77] 20 September 1954 [Harpenden, Hertfordshire. LondonHets] 19 September 1999 [Hawkhill Wood, Edinburgh, VC83. BJENH27:81-91] 17 September 1927 [Knockholt, Kent. LondonHets] 17 September 1966 [Lullingstone Park, Kent. LondonHets] 16 September 2001 [Malleny Garden, Balerno, VC83. BJENH27:81-91] 19 September 1983 [Mitcham Common, Surrey. LondonHets] 20 September 1983 [Mitcham Common, Surrey.

- LondonHets] 19 September 1998 [Newhailes Estate, near Edinburgh. BJENH27:81-91] 20 September 1918 [Palmers Green, Middlesex. LondonHets] 19 September 1998 [Seton Sands, VC82. BJENH27:81-91]
- 09E: 21 September 1983 [Blackchub, VC72. BJENH27:81-91] 24 September 1892 [Boxhill, Surrey. LondonHets] 21 September 1932 [Epping Forest, Essex. LondonHets] 22 September 1998 [Granton-Crewe disused railway, VC83. BJENH27:81-91] 24 September 2004 [Near Kingston, VC82. BJENH27:81-91] 23 September 2004 [North Berwick, VC82. BJENH27:81-91]
- 09F: 30 September 2007 [Above Elmley Castle on slopes of Bredon Hill, VC37. HN10:11] 26 September 1946 [Boxmoor, Hertfordshire. EMM85:249-253] 29 September 2005 [Dean Castle Country Park, VC75. BJENH27:81-91] 28 September 1915 [Epping Forest, Essex. Nymph. LondonHets] 29 September 1996 [Lochranza, Isle of Arran, VC100. BJENH27:81-91] 26 September 1929 [Selsdon, Surrey. LondonHets]
- 10A: 3 October 1946 [Anwoth, VC73. BJENH27:81-91] 2 October 1955 [Boxhill, Surrey. LondonHets] 5 October 1904 [Enfield, Middlesex. LondonHets] 2 October 1960 [Epping Forest, Essex. LondonHets] 5 October 2007 [Hyndland, Glasgow, VC77. BJENH27:81-91] 1 October 1978 [Kelvedon Hatch, Essex. LondonHets] 3 October 1895 [Mickleham, Surrey. LondonHets] 5 October 1960 [Rothesay, VC100. BJENH27:81-91] 1 October 1999 [Scone, Perth, VC89. BJENH27:81-91] 3 October 1971 [Stonachullin, VC101. BJENH27:81-91]
- 10B: 10 October 1959 [East Croydon, Surrey. LondonHets] 10 October 1946 [Gravesend, Kent. LondonHets] 7 October 1956 [Mickleham Downs, Surrey. Adults and nymphs. LondonHets] 10 October 1969 [Rowardennan, VC86. BJENH27:81-91] 6 October 1952 [South Kensington, Middlesex. LondonHets]
- 10C: 14 October 1991 [Bearsden, Glasgow, VC99. BJENH27:81-91] 13 October 1996 [Botanic Gardens, Glasgow, VC77. BJENH27:81-91] 15 October 2004 [Castle Loch, Culshabbin, VC72. BJENH27:81-91] 11 October 1991 [Freshwater, Isle of Wight. BJENH6:77] 14 October 2007 [Hundalee, Jedburgh, VC80. BJENH27:81-91] 15 October 1990 [Oldhall, Paisley, VC76. BJENH27:81-91] 12 October 1900 [Oxshott, Surrey. LondonHets] 11 October 1979 [Wetmoor, Gloucestershire. GloucsHets]
- 10D: 16 October 1956 [Carshalton, Surrey. LondonHets] 19 October 1970 [Caterham, Surrey. LondonHets] 17 October 1994 [Govanhill, Langside, Glasgow, VC77. BJENH27:81-91] 18 October 1950 [Paisley, VC76. BJENH27:81-91] 16 October 1952 [Podsmead, Gloucestershire. GloucsHets]
- 10E: 21 October 1946 [Boxmoor, Hertfordshire. EMM85:249-253] 23 October 1998 [Braidburn Valley, Edinburgh, VC83. BJENH27:81-91] 23 October 1998 [Morningside, Edinburgh, VC83. BJENH27:81-91]
- 10F: 27 October 2005 [Dean Castle Country Park, VC75. BJENH27:81-91] 26 October 1989 [Johnstone, VC76. BJENH27:81-91] 30 October 1927 [Kilmashogue, Co Dublin. IrelandHets] 27 October 1946 [Leete Wood, Bedfordshire. EMM86:6-8] 28 October 1996 [Lochranza, Isle of Arran, VC100. BJENH27:81-91] 27 October 1934 [Near Blandford. EMM71:113-114]
- 11A: 2 November 1934 [Ranmore Common, Surrey. LondonHets]
- 11C: 11 November 1933 [East Dulwich, Surrey. LondonHets] 11 November 1930 [Ennistymon, Co Clare. IrelandHets] 13 November 2000 [Luffness Mains, Aberlady, VC82. BJENH27:81-91] 11 November 1984 [Virgin's Corner Wood, Gloucestershire. GloucsHets]
- 11D: 17 November 1997 [Dawsholm Park, Glasgow VC99. BJENH27:81-91] 18 November 1976 [Edinburgh, VC83. BJENH27:81-91] 16 November 2005 [Maryhill, Glasgow, VC77. BJENH27:81-91]
- 11F: 30 November 1996 [Bo'ness, VC84. BJENH27:81-91]
- 12A: 1 December 2004 [North Berwick, VC82. BJENH27:81-91]
- 12D: 17 December 2005 [Cunningsburgh, VC112. BJENH27:81-91] 17 December 2006 [Kelvinbridge, Glasgow, VC77. BJENH27:81-91] 18-19 December 2010 [Wick, Worcestershire. EMM147:105-110]
- 12E: 22 December 1998 [Craigroyston, Edinburgh, VC83. BJENH27:81-91]
- 12F: 29 December 2000 [Currie, VC83. BJENH27:81-91]

- Cyphostethus tristriatus (Fabricius) (Acanthosomatidae)
  - 01A: 2 January 1934 [Ashridge, near Berkhamsted, Hertfordshire. LondonHets]
  - 02B: 8 February 1935 [Witherslack Wood, Lancashire. Male. EMM93:49-51]
  - 03F: 26 March 1831 [Birch Wood, Kent. LondonHets] 30 March 2008 [Glen Gairn, near Ballater, VC92. Adult. ERJV121:5-6]
  - 04B: 6/7 April 1985 [Sheffield. PTBENHS18:79]
  - 04C: 15 April 1951 [Coombe Hill, Buckinghamshire. LondonHets]
  - 04D: 18 April 2001 [Park Gate, South Hampshire. BJENH15:180]
  - 04F: 30 April 1922 [Harpenden district, Hertfordshire. LondonHets]
  - 05A: 1 May 1932 [Farley Mount Down, Hampshire. JESSE1:57]
  - 05B: 10 May 2008 [Clashindarroch Forest, VC93. ERJV121:5-6] 7 May 2005 [Whipsnade Wild Animal Park, Dunstable, Bedfordshire. BJENH20:123-125]
  - 05C: 12 May 1991 [Charlton, London. ERJV103:296] 12 May 1991 [Charlton, London. ERJV103:296]
  - 05D: 17 May 2008 [Glen Gairn, near Ballater, VC92. Adults *in copula*. ERJV121:5-6] 20 May 2003 [Gresford garden, VC50. Hem6:218]
  - 05E: 24 May 2009 [Birkenburn, near Dunkeld, VC89. Females. ERJV122:154]
  - 05F: 26 May 1983 [Hackhurst, Surrey. PTBENHS18:20]
  - 06A: 2 June 1991 [Charlton, London. ERJV103:296]
  - 06B: 8 June 1996 [Burnham Beeches, Buckinghamshire. BJENH10:122]
  - 06C: 12 June 1991 [Charlton, London. ERJV103:296] 15 June 2000 [Hepple Whitefield Farm, Northumberland National Park, VC67. Adults. ERJV113:13-16]
  - 06D: 18 June 1983 [Friston Forest, Sussex. PTBENHS18:20] 18 June 2000 [Hisehope Burn SSSI, VC66. Adults. ERJV113:13-16]
  - 07A: 4 July 1991 [Flower Garden, Greenwich Park, London. EMM128:136] 1 July 1987 [Richmond Hill, Surrey. ERJV103:296]
  - 07B: 9 July 2019 [Haxby Cemetery, near York, North-east Yorkshire. Hem6:254] 10 July 1984 [Minehead, South Somerset. HSGN4:5] 8 July 2019 [Strensall, near York, North-east Yorkshire. Hem6:253] 8 July 2019 [The Blacksmiths Hotel, Hartoft End, North York Moors, North-east Yorkshire. Hem6:254] 7 July 2019 [York Hull Road Travelodge, South-east Yorkshire. Hem6:253]
  - 07E: 25 July 1977 [Carshalton Beeches, Surrey. ERJV96:187]
  - 07F: 28 July 2008 [Dumfries, VC72. HN17/18:22]
  - 08A: 5 August 2000 [Cheviot Hills, VC68. Adults. ERJV113:13-16]
  - 08B: 8 August 2000 [Bog Farm SSSI, VC67. Adults and nymphs. ERJV113:13-16] 8 August 2019 [North Petherton Cemetery, VC5. Hem6:263]
  - 08C: 11 August 2015 [Chipping Norton Cemetery, Oxfordshire. Nymphs reared in culture. Hem3:126] 15 August 2014 [Clifton Heath, Oxfordshire. Hem2:58] 11 August 2000 [Oakeydene, VC67. Adults. ERJV113:13-16]
  - 08D: 19 August 2014 [Brandon, VC26. Hem3:92] 19 August 1992 [Gosberton Clough, VC53. Hem3:83] 20 August 2000 [Park Burn, VC67. ERJV113:13-16]
  - 08E: 22 August 2000 [Rowley Burn, near Hexham, Northumberland. Nymph. ERJV113:13-16]
  - 09A: 1 September 1951 [Coombe Hill, Buckinghamshire. Nymph. LondonHets] 4 September 2004 [Pershore, Worcestershire. Adults and nymphs. EMM142:52]
  - 09C: 15 September 1934 [Boxhill, Surrey. LondonHets] 12 September 1990 [Gibraltar Point NNR, VC54. Hem3:83] 15 September 2010 [Pencraig, near Ross-on-Wye, VC36. HN16:13]
  - 09D: 19 September 1910 [Gomshall, Surrey. Nymphs. LondonHets]
  - 09E: 24 September 1892 [Boxhill, Surrey. LondonHets] 22 September 1951 [Coombe Hill, Buckinghamshire. LondonHets] 25 September 1982 [Park Mill, Gower, South Wales. Adults and nymphs. EMM119:220]
  - 09F: 26 September 1982 [Harold Hill, Essex. LondonHets] 28 September 1992 [Redland, Gloucestershire. GloucsHets]
  - 10A: 2 October 1933 [Ashridge, near Berkhamsted, Hertfordshire. LondonHets] 3 October 1943 [Hilcot, Gloucestershire. GloucsHets] 5 October 1962 [Imperial College Field station, Ascot, Berkshire. Adults and nymph. EMM98:250] 2 October 1984 [Minehead, South Somerset.

- HSGN4:5] 4 October 2009 [Near Hopes Reservoir, Lammermuir Hills, VC82. Adults and nymphs. ERJV122:154] 2 October 1983 [Noar Hill NR, VC12. Hem3:103] 5 October 1984 [The Ness, Dawlish, South Devon. HSGN4:5]
- 10B: 9 October 1995 [Castleknock, County Dublin. EMM132:314]
- 10C: 12 October 1933 [Riddlesdown, Surrey. LondonHets] 12 October 1984 [Thames Marshes, Belvedere, Kent. ERJV101:47-49]
- 10D: 17 October 1996 [Brenchley Gardens, Peckham, Surrey. BJENH10:177] 17 October 2004 [Croft Pascoe Plantation, Goonhilly Downs, Cornwall. CornwallHets] 17 October 1996 [Dulwich Park, Surrey. BJENH10:177] 20 October 1951 [Purley Downs, Surrey. LondonHets]
- 10E: 22 October 1935 [Imperial College Biological Field Station, Slough. JSBE1:165-166]
- 11A: 3 November 2014 [Hunstanton, Tescos car park, VC28. Hem3:92]
- 11B: 7 November 1943 [Daglingworth, Gloucestershire. GloucsHets]
- 11C: 11 November 1951 [Riddlesdown, Surrey. LondonHets]
- 12B: 9 December 1990 [Bredon Hill, Worcestershire. EMM129:60]
- 12D: 18-19 December 2010 [Little Comberton, Worcestershire. EMM147:105-110] 18-19 December 2010 [Wick, Worcestershire. EMM147:105-110] 18-19 December 2010 [Wick, Worcestershire. EMM147:105-110]
- 12E: 25 December [Carshalton Beeches, Surrey. ERJV96:187] 25 December 2006 [Launceston, Cornwall. CornwallHets] 25 December 1980 [Southern half of England. HSGN7:6]

#### Elasmostethus interstinctus (Linnaeus) (Acanthosomatidae)

- 01F: 26 January 1985 [Oakley Wood, Gloucestershire. GloucsHets]
- 04A: 2 April 1932 [Glenealy, Co Wicklow. IrelandHets]
- 04E: 21 April 2008 [Hencott Pool, VC40. Hem3:92]
- 04F: 26 April 1953 [Boxhill and Ranmore Common. PTSLENHS1953-54:77] 27 April 1993 [Housham, VC53. Hem3:83]
- 05A: 5 May 1935 [Bookham Common, Surrey. LondonHets]
- 05B: 10 May 1964 [Seal, Kent. LondonHets]
- 05C: 12 May 1951 [Ashtead Wood, Surrey. LondonHets] 11 May 1951 [Hodgemoor Wood, Chalfont St Giles, Buckinghamshire. LondonHets]
- 05D: 18 May 1901 [Esher Common, Surrey. LondonHets]
- 05E: 21 May 1904 [Headley Lane, Surrey. LondonHets] 23 May 1953 [Mitcham Common, Surrey. LondonHets] 21 May 2005 [Seal Chart, Sevenoaks, Kent. BJENH19:133-135] 25 May 1947 [Weybridge, Surrey. LondonHets]
- 05F: 28 May 1916 [Boxhill, Surrey. LondonHets] 31 May 1952 [Monk's Wood, Huntingdonshire. EMM88:162]
- 06A: 4 June 1932 [Mickleham, Surrey. LondonHets] 4 June 1985 [Standish Wood, Gloucestershire. GloucsHets] 3 June 1910 [Wimbledon Common, Surrey. LondonHets]
- 06B: 10 June 1899 [West Wickham, Kent. LondonHets]
- 06C: 11 June 1949 [Oxshott Heath and Esher Common. PTSLENHS1949-50:74-75]
- 06D: 18 June 1944 [Aspley Wood, Bedfordshire. EMM81:183-185] 17 June 1983 [Chalk Lane, The King's Forest, VC26. Hem4:17] 16 June 1983 [Croxton, VC28. Hem4:17] 17 June 1951 [Glen Glass, Easter Ross. EMM87:255] 19 June 1943 [Rendcomb, Gloucestershire. GloucsHets] 17 June 1951 [Westerham district, Kent. LondonHets]
- 06E: 25 June 2015 [Great Pen Wood, VC12. Hem3:53] 25 June 1951 [Strathspey, Morayshire. EMM87:255]
- 06F: 30 June 1886 [Epping Forest, Essex. LondonHets] 26 June 1964 [Esher Common, Surrey. Male. EMM102:198] 30 June 1951 [Oxshott Heath, Surrey. LondonHets]
- 07A: 3 July 2015 [Beale Park, Berkshire. BJENH28:240] 4 July 2004 [Bodmin Parkway, Cornwall. CornwallHets]
- 07C: 13 July 1951 [West End Common, Surrey. LondonHets]
- 07D: 20 July 1983 [Chalk Lane, The King's Forest, VC26. Hem4:17]
- 07E: 25 July 1948 [Flitwick Moor, Bedfordshire. Nymphs. EMM86:6-8] 21 July 1983 [Santon Warren, VC28. Hem4:17]

- 07F: 31 July 1977 [Ellenden Wood, near Whitstable, Kent. PTBENHS11:130] 28 July 1950 [Esher Common, Surrey. LondonHets] 31 July 2004 [Redrice Wood, Cornwall. CornwallHets]
- 08A: 2 August 2015 [Vale Park, Aylesbury, Buckinghamshire. Nymphs reared in culture. Hem3:126] 5 August 1906 [West End Common, Surrey. LondonHets]
- 08B: 9 August 1980 [Chalk Lane, The King's Forest, VC26. Hem4:17] 10 August 1985 [Near Sapperton, Gloucestershire. GloucsHets] 10 August 1980 [Two Mile Bottom, VC28. Hem4:17]
- 08C: 14 August 1980 [Brandon Park, VC26. Hem4:17] 15 August 2014 [Clifton Heath, Oxfordshire. Hem2:58] 15 August 1943 [Hampstead Heath, Middlesex. EMM81:163-164] 15 August 1979 [Two Mile Bottom, VC28. Hem4:17]
- 08D: 20 August 1948 [Blackhafields Plantation, Ampthill, Bedfordshire. EMM86:6-8] 20 August 2012 [Bulford Field and Dumbell Copse, VC8. Hem5:188] 19 August 1979 [Chalk Lane, The King's Forest, VC26. Hem4:17] 17 August 1980 [Hockham Heath, VC28. Hem4:17] 16 August 1973 [Moor Farm LWT Reserve, VC54. Hem3:83] 19 August 1985 [Severn Bank, Broad Oak, Newnham, Gloucestershire. GloucsHets] 19 August 2007 [Sneem, Co Kerry. HN10:13]
- 08E: 24 August 2002 [Bernwood Forest, Buckinghamshire. BJENH17:248-252] 25 August 1951 [Keston, Kent. LondonHets] 24 August 1916 [Oxhey, Hertfordshire. Nymph. LondonHets]
- 08F: 27 August 1955 [Bookham Common, Surrey. LondonHets] 27 August 1937 [Boxhill, Surrey. LondonHets] 30 August 1950 [Hodgemoor Wood, Chalfont St Giles, Buckinghamshire. LondonHets]
- 09A: 1 September 1945 [Cooper's Hill, Amphill, Bedfordshire. EMM86:6-8] 2 September 1950 [Esher Common, Surrey. LondonHets] 5 September 1991 [Freshwater, Isle of Wight. BJENH6:77] 3 September 1923 [Near Yarmouth, Isle of Wight. Nymph. EMM60:117-118] 1 September 1955 [Ruislip NR, Middlesex. LondonHets]
- 09B: 9 September 1944 [King's Wood, Bedfordshire. EMM86:6-8] 6 September 1950 [Pollard's Wood, Little Chalfont, Buckinghamshire. LondonHets] 7 September [Shincliffe Woods, near Durham. Ent91:45] 6 September 1901 [Shirley, Surrey. LondonHets] 9 September 1951 [Walton-on-the-Hill, Surrey. LondonHets]
- 09C: 13 September 1882 [Coombe Woods, Surrey. LondonHets] 14 September 1897 [Epping Forest. EMM34:13-15] 11 September 1992 [Freshwater, Isle of Wight. BJENH6:77] 14 September 1944 [Heath and Range, near Shire Oak, Bedfordshire. EMM81:183-185] 14 September 1991 [Nagshead Dean, Gloucestershire. GloucsHets]
- 09D: 20 September 1899 [Ethie Burn, Black Isle, South Sutor of Cromarty. Ent33:10] 16 September 1944 [Flitwick Moor, Bedfordshire. EMM86:6-8] 18 September 1898 [Mickleham, Surrey. LondonHets] 19 September 1983 [Mitcham Common, Surrey. LondonHets] 20 September 1899 [West Wickham, Kent. LondonHets]
- 09E: 23 September 1943 [Colesbourne, Gloucestershire. GloucsHets] 25 September 2004 [Duchy College, Rosewarne, Cornwall. CornwallHets] 25 September 1897 [Epping Forest. EMM34:13-15] 25 September 1951 [Esher Common, Surrey. LondonHets] 24 September 1972 [Glynn Valley, Cornwall. CornwallHets] 24 September 2001 [Near Addington, Surrey. BJENH15:172]
- 09F: 26 September 1999 [Bissoe Valley, Cornwall. CornwallHets] 29 September 1945 [Leighton Buzzard Pits, Bedfordshire. EMM86:6-8]
- 10A: 2 October 1935 [Berkhamsted Common, Hertfordshire. LondonHets] 1 October 1951 [Oxshott Heath, Surrey. LondonHets] 2 October 1954 [Tregaron Bog, Cardiganshire. Males. EMM92:54-64]
- 10B: 7 October 1984 [Darland's Lake NR, Totteridge, Hertfordshire. LondonHets] 8 October 1898 [West Wickham, Kent. LondonHets]
- 10D: 18 October 1997 [Burnham Beeches, Buckinghamshire. BJENH13:244-245] 19 October 1983 [Mitcham Common, Surrey. LondonHets]
- 11B: 8 November 1933 [Arbrook Common, Surrey. LondonHets]
- 11E: 23 November 1930 [Clara, Co Wicklow, IrelandHets]

Elasmucha grisea (Linnaeus) (Acanthosomatidae)

- 03B: 6 March 1934 [Colne Valley, Uxbridge. Ent71:148-153]
- 03E: 25 March 1903 [Kensington, Middlesex. LondonHets]
- 04A: 2 April 1938 [Bookham Common, Surrey. LondonHets]

- 04E: 23 April 1961 [Chilworth, Surrey. LondonHets]
- 04F: 29 April 2005 [By River Rother at Sheet, VC12. Hem3:103] 28 April 1899 [Kilderry, East Donegal. IrelandHets] 30 April 1938 [Oxshott, Surrey. LondonHets] 29 April 1943 [Rendcomb, Gloucestershire. GloucsHets]
- 05B: 9 May 1945 [Arnold's Pits, Leighton Buzzard, Bedfordshire. EMM86:6-8] 8 May 1955 [Bookham Common, Surrey. LondonHets] 10 May 1941 [Harpenden, Hertfordshire. LondonHets]
- 05C: 12 May 1951 [Ashtead Wood, Surrey. LondonHets] 12 May 1945 [Aspley Heath, Bedfordshire. EMM86:6-8] 13 May 1951 [Banstead Wood, Surrey. LondonHets] 11 May 1935 [Boxhill, Surrey. LondonHets] 14 May 1949 [Byfleet, Surrey. PTSLENHS1949-50:71-73] 13 May 1950 [Colley Hill district, Surrey. LondonHets] 13 May 1977 [Darenth Wood, Kent. LondonHets] 14 May 1894 [Headley Lane, Surrey. LondonHets] 13 May 1932 [Pickworth, Rutland. EMM68:213-214]
- 05D: 19 May 1945 [Flitwick Moor, Bedfordshire. EMM86:6-8] 18 May 1958 [Horsley, Surrey. LondonHets] 18 May 1901 [Oxshott. PSLENHS1901:11-14] 19 May 1900 [Oxshott. PSLENHS1900:6-14]
- 05E: 21-24 May 2007 [Mary Knoll Valley, Herefordshire. BJENH21:187-192] 23 May 1953 [Mitcham Common, Surrey. LondonHets] 22 May 1898 [Skellingthorpe Wood, Lincolnshire. Butler1923] 25 May 1893 [Wimbledon Common, Surrey. LondonHets]
- 05F: 30 May 2006 [Tregonnett Wood, Kerney Bridge, South Hill, Cornwall. CornwallHets]
- 06A: 4 June 1935 [Bookham Common, Surrey. LondonHets] 5 June 1935 [Bookham Common, Surrey. LondonHets] 1 June 1885 [Boxhill, Surrey. LondonHets] 2 June 2004 [Breney, Cornwall. CornwallHets] 4 June 1871 [Exeter. Female. EMM9:13] 3 June 1973 [Moor Farm LWT Reserve, VC54. Hem3:83] 2 June 1900 [Oxshott, Surrey. LondonHets] 2 June 1991 [Swifts Hill, Gloucestershire. GloucsHets]
- 06B: 9 June 1963 [Challock, Kent. PTSLENHS1963Part1:67] 8 June 2004 [Dunmere Wood, Cornwall. CornwallHets] 6 June 1871 [Exeter. Female and eggs. EMM9:13] 9 June 1969 [West Wickham, Kent. LondonHets]
- 06C: 11 June 1944 [Colesbourne, Gloucestershire. GloucsHets] 15 June 1892 [Wimbledon Common, Surrey. LondonHets]
- 06D: 20 June 1971 [Alderstead Heath, Surrey. PTBENHS4:122-123] 17 June 1983 [Chalk Lane, The King's Forest, VC26. Hem4:18] 19 June 1870 [Exeter. Adult and nymphs. EMM7:53-55] 17 June 1927 [Southampton, Hampshire. HantsHets] 17 June 1951 [Westerham district, Kent. LondonHets]
- 06E: 23 June 1870 [Exeter. Adult and nymphs. EMM7:53-55] 25 June 1870 [Exeter. Adult and nymphs. EMM7:53-55] 25 June 1932 [Potter Hanworth, Lincolnshire. EMM68:213-214]
- 06F: 26 June 1964 [Esher Common, Surrey. EMM102:198] 29 June 1871 [Exeter. Female and nymphs. EMM9:13] 29 June 1959 [Oxshott, Surrey. LondonHets] 30 June 1954 [Silwood Park, Berkshire. Male. EMM91:47]
- 07A: 5 July 1934 [Berkhamsted Common, Hertfordshire. Female and nymphs. LondonHets] 4 July 2004 [Bodmin Parkway, Cornwall. CornwallHets] 3 July 1871 [Exeter. Nymphs. EMM11:42-43] 2 July 1944 [Flitwick Moor, Bedfordshire. EMM86:6-8]
- 07B: 10 July 1942 [Bookham Common, Surrey. LondonHets] 7 July 1963 [Chippenham Fen, Cambridgeshire. PTSLENHS1963Part1:69-70] 6 July 1871 [Exeter. Nymphs. EMM11:42-43] 9 July 1871 [Exeter. Female and nymphs. EMM9:13] 6 July 1907 [Richmond Park, Surrey. LondonHets]
- 07C: 13 July 1871 [Exeter. Female and nymphs. EMM9:13]
- 07D: 19 July 2004 [Bridgetown, Cornwall. CornwallHets] 20 July 1983 [Chalk Lane, The King's Forest, VC26. Hem4:18] 20 July 1934 [Imperial College Biological Field Station, Slough. TSBE2:47-67] 19 July 1945 [King's Wood, Bedfordshire. Nymphs. EMM86:6-8] 17 July 1945 [Luton, Bedfordshire. Nymph. EMM86:6-8]
- 07E: 21 July 1983 [Santon Warren, VC28. Hem4:18]
- 08B: 9 August 1966 [Bookham Common, Surrey. LondonHets] 9 August 1980 [Chalk Lane, The King's Forest, VC26. Hem4:18] 9 August 1984 [Darland's Lake NR, Totteridge, Hertfordshire. LondonHets] 7 August 2003 [Frimley, Surrey. BJENH17:243]

- 08C: 11 August 1945 [Baker's Wood, Heath and Reach, Bedfordshire. EMM86:6-8] 14 August 1980 [Brandon Park, VC26. Hem4:18] 15 August 2014 [Clifton Heath, Oxfordshire. Hem2:58] 14 August 1998 [Clitters Mine, Gunnislake, Cornwall. CornwallHets] 15 August 1943 [Hampstead Heath, Middlesex. EMM81:163-164] 15 August 1993 [Sedbury Cliff, Gloucestershire. GloucsHets] 13 August 2006 [Wandsworth Common, London. Adults and nymphs. BJENH20:213-216] 13 August 1951 [West End Common, Surrey. LondonHets]
- 08D: 20 August 1948 [Blackhafields Plantation, Ampthill, Bedfordshire. Adults. EMM86:6-8] 16 August 1916 [Chorley Wood, Hertfordshire. LondonHets] 19 August 1952 [Gerrards Cross, Buckinghamshire. LondonHets] 17 August 1980 [Hockham Heath, VC28. Hem4:18] 18 August 1945 [Purley, Surrey. LondonHets] 20 August 1989 [Sandhurst NR, Gloucestershire. GloucsHets] 19 August 1985 [Severn Bank, Broad Oak, Newnham, Gloucestershire. GloucsHets]
- 08E: 25 August 1956 [Keston, Kent. LondonHets] 24 August 1916 [Oxhey, Hertfordshire. LondonHets]
- 08F: 30 August 1936 [Blackheath, Kent. LondonHets] 27 August 1937 [Boxhill. PTSLENHS1937-38:51] 29 August 1896 [Headley Lane, Surrey. LondonHets] 26 August 1956 [Otford. PTSLENHS1956:83-84]
- 09A: 4 September 1949 [Ash Vale, Surrey. PTSLENHS1949-50:78] 3 September 1944 [Deadmansea Wood, Bedfordshire. EMM86:6-8] 2 September 1950 [Esher Common, Surrey. LondonHets]
- 09B: 7 September 1946 [Ampthill, Bedfordshire. EMM86:6-8] 10 September 1938 [Ashstead, Surrey. LondonHets] 8 September 1935 [Byfleet, Surrey. PTSLENHS1935-36:27-28] 9 September 2006 [Duchy College, Rosewarne, Cornwall. CornwallHets]
- 09C: 14 September 1986 [Ancaster Valley, VC53. Hem3:83] 15 September 1934 [Boxhill, Surrey. LondonHets] 13 September 1882 [Coombe Wood, Surrey. LondonHets] 14 September 1897 [Epping Forest. EMM34:13-15] 14 September 1944 [Heath and Range, near Shire Oak, Bedfordshire. EMM81:183-185] 14 September 1895 [Shirley Common, Surrey. LondonHets]
- 09D: 17 September 1966 [Darenth Wood, Kent. LondonHets] 20 September 1899 [Ethie Burn, Black Isle, South Sutor of Cromarty. Ent33:10] 16 September 1944 [Flitwick Moor, Bedfordshire. EMM86:6-8] 19 September 1983 [Mitcham Common, Surrey. LondonHets]
- 09E: 25 September 1897 [Epping Forest. EMM34:13-15] 21 September 1946 [Flitwick Moor, Bedfordshire. EMM86:6-8] 24 September 1972 [Glynn Valley, Cornwall. CornwallHets]
- 10A: 2 October 1955 [Boxhill, Surrey. LondonHets] 3 October 1943 [Hilcot, Gloucestershire. GloucsHets] 2 October 1954 [Tregaron Bog, Cardiganshire. Males. EMM92:54-64]
- 10B: 10 October 1944 [Oldhill Wood, Whipsnade, Bedfordshire. EMM81:183-185]
- 10C: 14 October 1956 [Bookham Common, Surrey. Nymphs reared in culture. LondonHets]
- 10E: 24 October 1983 [Mitcham Common, Surrey. LondonHets]
- 11A: 4 November 1938 [Westerham, Kent. LondonHets]
- 11B: 8 November 1933 [Arbrook Common, Surrey. LondonHets] 8 November 1933 [Oxshott, Surrey. LondonHets]

## **Detailed records**

Acanthosoma haemorrhoidale (Linnaeus) (Acanthosomatidae)

In crevices of beech tree [St Ann's, Co Dublin. 29 January 1927. IrelandHets]

Under bark on dead oak [Silk Wood, Westonbirt, Gloucestershire. 15 March 1991. GloucsHets]

Under bark on dead oak [Wenchford Dean, Gloucestershire. 14 March 1991. GloucsHets]

Under bark on beech [Popes Wood, Gloucestershire. 23 March 1991. GloucsHets]

Under hawthorn bark [Phoenix Park, Co Dublin. 26 March 1893. IrelandHets]

Beating hawthorn [Bagley Wood, near Oxford, VC22. 28 April 1893. EMM29:191-192]

Beating [Highams Park, Walthamstow, Essex. 16 May 1895. LondonHets]

On oak [Claygate, Surrey. 24 May 1953. LondonHets]

On birch [Boxhill, Surrey. 4 June 1905. LondonHets]

On Crataegus [Coulsdon, Surrey. 5 June 1962. LondonHets]

Sweeping and beating along a track and dismantled railway line [The Warrens, near South Cave, VC61. 9 June 1979. Hem4:146]

In culture voided a puparium of the tachinid *Lophosia fasciata* [Oxleas Wood SSSI, Shooters Hill, London. 13 June 1986. ERJV99:83]

On hawthorn [Rendcomb Park, Gloucestershire. 12 June 1988. GloucsHets]

On aspen [King's Wood, Bedfordshire. 13 July 1946. EMM86:6-8]

Beating *Crataegus monogyna* [Derwenlas, Montgomeryshire. 20 July 1955. Nymphs. EMM92:54-64]

Beating *Prunus spinosa* and other trees [Penparcau, Cardiganshire. 18 July 1955. Nymphs. EMM92:54-64]

On hawthorn [Windsor Forest. 2 August. Nymphs. Butler1923]

From Rowan (*Sorbus aucuparia*) [Bicester Town Cemetery, Oxfordshire. 9 August 2015. Nymphs reared in culture. Hem3:126]

From Tamarisk (*Tamarix*) [Dunstan Road, Oxford, Oxfordshire. 15 August 2015. Nymphs reared in culture. Hem3:126]

On ash and hawthorn [Harlington, Bedfordshire. 12 August 1945. EMM86:6-8]

On Crataegus [Ruislip, Middlesex. 11 August 1934. LondonHets]

Beating ash [Bookham Common, Surrey. 20 August 1894. LondonHets]

Beating [Eynsford, Kent. 19 August 1933. Adults and nymphs. PTSLENHS1933-34:32-33]

From Mistletoe (*Viscum album*) on rowan (*Sorbus aucuparia*) [St Mary's Church, Oxford. 20 August 2014. Nymphs reared in culture. Hem2:49]

On brambles in garden [Blackheath, Kent. 30 August 1964. LondonHets]

From Hawthorn (*Crataegus*) [Sandhouse Lane NR, near Leighton Buzzard, Bedfordshire. 26 August 2015. Nymphs reared in culture. Hem3:126]

On Crataegus [Uxbridge, Middlesex. 27 August 1933. Ent71:148-153]

On hawthorn [Ash Vale, Surrey. 4 September 1949. PTSLENHS1949-50:78]

On oak [Deadmansea Wood, Bedfordshire. 3 September 1944. EMM86:6-8]

On Salix [Near Houghton Regis, Bedfordshire. 10 September 1944. EMM81:183-185]

Beating hawthorn. Some of the nymphs were parasitized by Phasiinae (Tachinidae) [Burford Bridge, Boxhill, Surrey. 12 September 1953. Adults and nymphs. PTSLENHS1953-54:91-92]

On oak [Imperial College Biological Field Station, Slough. 12 September 1934. TSBE2:47-67]

On the flowers/seeds of a thicket of Stinging Nettle, 265m OD [Above Elmley Castle on slopes of Bredon Hill, VC37. 30 September 2007. HN10:11]

In a small orchard, on asparagus beneath beech trees [Boxmoor, Hertfordshire. 26 September 1946. EMM85:249-253]

On elderberry leaves [Selsdon, Surrey. 26 September 1929. LondonHets]

Beneath oak [Enfield, Middlesex. 5 October 1904. LondonHets]

On wall [Gravesend, Kent. 10 October 1946. LondonHets]

Indoors [Carshalton, Surrey. 16 October 1956. LondonHets]

On hawthorn [Caterham, Surrey. 19 October 1970. LondonHets]

In a small orchard, on asparagus beneath beech trees [Boxmoor, Hertfordshire. 21 October 1946. EMM85:249-253]

On beech trunk [Leete Wood, Bedfordshire. 27 October 1946. EMM86:6-8]

On oak [Ranmore Common, Surrey. 2 November 1934. LondonHets]

On wych elm [Virgin's Corner Wood, Gloucestershire. 11 November 1984. GloucsHets]

Frozen out of a *Cedrus deodara* in a garden [Wick, Worcestershire. 18-19 December 2010. EMM147:105-110]

On birch [Abbey Wood, Kent. 1898. LondonHets]

On Laurestinus [Ballinderry, Co Antrim. IrelandHets]

On sallow [Bentley Woods, Suffolk. SuffolkHets]

Parasitized with tachinid larva [Box Hill. Adults. S&L1959]

Beating [Buckland Hills, Surrey. LondonHets]

In a tall hawthorn hedge heavy with ripe berries [Carlisle, Cumberland. September 1949. Adults and nymphs. EMM86:95]

Hawthorn [Chapelizod, Co Dublin. September 1928. IrelandHets]

In a garden [Felling, County Durham. EMM85:308]

In the gizzards of Great Tits and a Coal Tit [Forest of Dean, Gloucestershire. 1948-1951. Adult. EMM92:68-71]

On Rowan [Fylingdales Moor, VC62. August 2003. Adults and nymphs. HN7:14]

Under moss on stones [Glendalough, Co Wicklow. Winter. IrelandHets]

On birch and oak [Grounds of Pest Infestation Laboratory, Slough. September 1950. EMM87:103]

In a *Deschampsia* tuft [Grounds of the Pest Infestation Laboratory, Slough. December 1950.

Adult. EMM87:201]

Beating hawthorn (*Crataegus*) bearing berries. In culture, fed largely on the green berries [Grounds of the Pest Infestation Laboratory, Slough. Nymphs. EMM87:308]

Beating oak trees bearing green acorns [Grounds of the Pest Infestation Laboratory, Slough. Nymphs. EMM87:308]

On Hawthorn [Hampstead Heath. PTSLENHS1949-50:36-38]

On birch [Headley Lane. Saunders 1892]

On Betula and Crataegus, overwintering in moss and conifers [Hertfordshire. LondonHets]

Fogged with insecticide from the canopy of mature oaks [Isabella plantation, Richmond Park, Surrey. 1984. HSGN5:7]

On hawthorn [Isle of Wight. September 1928. Adults and nymphs. EMM65:17]

On birch [Kenmare, South Kerry. July 1898. IrelandHets]

On hawthorn [Kenmare, South Kerry. June 1903. IrelandHets]

On birch [Kilruddery, Co Wicklow. August 1927. Nymph. IrelandHets]

On hawthorn (*Crataegus*) in woodland [Kinloch Castle, Isle of Rhum. May/June 1960. EMM96:144]

On birch and hawthorn [Kinloch woodlands, Isle of Rhum. TSBE18:91-167]

On a window blind in a sitting room [Knocknacarry, Co Antrim. IrelandHets]

Dead under bark of dead oak [Lineover Wood, Gloucestershire. February 1985. GloucsHets]

In parks and gardens [London. S&L1959]

On apple [Milltown, Co Dublin. June 1934. IrelandHets]

Beating hawthorn [Near Tring. September 1899. EMM35:270]

On Cupressus [Poyntzpass, Co Armagh. IrelandHets]

On a whitebeam [Ravenglass, Cumberland. EMM86:95]

On sallows on a river bank [River Soar, Leicestershire. July 1932. EMM68:213-214]

At light [Rothamsted Experimental Station, Harpenden. 1936. Male. PRESL(A)13:19-24]

In a light trap [Rothamsted Experimental Station, Harpenden. 1947/1949. Male and females. TRESL112:173-220]

Hawthorn [Santry, Co Dublin. September 1929. IrelandHets]

From hawthorn, willow, *Rhododendron ponticum*, birch, rowan, elm and elder. Breeding on *Crataegus monogyna* and *Cotoneaster bullata*. Under bark of alder, beech, goat willow and wych elm in autumn/winter. From yew and in leaf litter and compost in winter. In gardens, parks, cemeteries, woodland and hedgerows [Scotland. BJENH27:81-91]

In culture with sprigs of hawthorn, seen to feed on the berries and leaves. Also drank from drops of water [Slough, Buckinghamshire. 1946. Adults and nymphs. EMM85:193-206]

On window ledge of a house [St John's Wood, Middlesex. April 1942. LondonHets]

In a dead crow [Suffolk, April, SuffolkHets]

On willow [Tiptoe, Hampshire. July 1922. Female. EMM58:231]

On bramble flowers [Toomie's Wood, North Kerry, July 1927. Male and female. IrelandHets]

On fruiting Rowan (*Sorbus aucuparia*) and Tree Cotoneaster (*Cotoneaster*) in a garden [VC61. Nymphs. HN7:14]

In a garden [Warwickshire. HN7:11]

On Hawthorn [Well Vale, Lincolnshire. Saunders 1892]

Hawthorn [Whitechurch, Co Dublin. September 1932. IrelandHets]

Under conifer bark and among curly kale [Yorkshire. In the winter months. Adults. HN7:14]

Cyphostethus tristriatus (Fabricius) (Acanthosomatidae)

In Thuja [Ashridge, near Berkhamsted, Hertfordshire. 2 January 1934. LondonHets]

- On juniper [Birch Wood, Kent. 26 March 1831. LondonHets]
- Beating mature, female, berry-bearing juniper (*Juniperus communis*), altitude 325 metres [Glen Gairn, near Ballater, VC92. 30 March 2008. Adult. ERJV121:5-6]
- Off Cupressus [Park Gate, South Hampshire. 18 April 2001. BJENH15:180]
- On juniper (Juniperus communis) [Farley Mount Down, Hampshire. 1 May 1932. JESSE1:57]
- Beating mature, female, berry-bearing juniper (*Juniperus communis*) in a forest clearing, altitude 432 metres [Clashindarroch Forest, VC93. 10 May 2008. ERJV121:5-6]
- From Lawson's Cypress (*Chamaecyparis lawsoniana*) [Whipsnade Wild Animal Park, Dunstable, Bedfordshire. 7 May 2005. BJENH20:123-125]
- On a garden hedge of Lawson Cypress (*Chamaecyparis lawsoniana*) [Charlton, London. 12 May 1991. ERJV103:296]
- On Chinese Thuja (*Thuja orientalis*) in an urban park [Charlton, London. 12 May 1991. ERJV103:296]
- Beating mature, female, berry-bearing juniper (*Juniperus communis*), altitude 351 metres [Glen Gairn, near Ballater, VC92. 17 May 2008. Adults *in copula*. ERJV121:5-6]
- Beating a mature female juniper (*Juniperus communis*) bearing berries at altitude 165m [Birkenburn, near Dunkeld, VC89. 24 May 2009. Females. ERJV122:154]
- On Chinese Thuja (*Thuja orientalis*) in an urban park [Charlton, London. 2 June 1991. ERJV103:296]
- On a garden hedge of Lawson Cypress (*Chamaecyparis lawsoniana*) [Charlton, London. 12 June 1991. ERJV103:296]
- Beating female juniper bushes bearing numerous ripe berries [Hepple Whitefield Farm, Northumberland National Park, VC67. 15 June 2000. Adults. ERJV113:13-16]
- On Western Red Cedar (*Thuja plicata*) [Flower Garden, Greenwich Park, London. 4 July 1991. EMM128:136]
- From cypress in a garden [Richmond Hill, Surrey. 1 July 1987. ERJV103:296]
- Beating Lawson cypress in a cemetery [Haxby Cemetery, near York, North-east Yorkshire. 9 July 2019. Hem6:254]
- Beating Lawson cypress by the roadside [Strensall, near York, North-east Yorkshire. 8 July 2019. Hem6:253]
- Beating Lawson cypress in the grounds of a hotel [The Blacksmiths Hotel, Hartoft End, North York Moors, North-east Yorkshire. 8 July 2019. Hem6:254]
- Beating Lawson cypress in the grounds of a hotel [York Hull Road Travelodge, South-east Yorkshire. 7 July 2019. Hem6:253]
- On a Lawson cypress (*Chamaecyparis lawsoniana*) in a garden. In culture seen to feed on green cones of the plant [Carshalton Beeches, Surrey. 25 July 1977. ERJV96:187]
- In a garden [Dumfries, VC72. 28 July 2008. HN17/18:22]
- From berry-bearing juniper [Bog Farm SSSI, VC67. 8 August 2000. Adults and nymphs. ERJV113:13-16]
- Beating [North Petherton Cemetery, VC5. 8 August 2019. Hem6:263]
- From Lawson's Cypress (*Chamaecyparis lawsoniana*) [Chipping Norton Cemetery, Oxfordshire. 11 August 2015. Nymphs reared in culture. Hem3:126]
- Sweeping grass [Clifton Heath, Oxfordshire. 15 August 2014. Hem2:58]
- Beating juniper [Oakeydene, VC67, 11 August 2000, Adults, ERJV113:13-16]
- Shaking *Chamaecyparis lawsoniana* 'Erecta Viridis' in a garden [Pershore, Worcestershire. 4 September 2004. Adults and nymphs. EMM142:52]
- On a Lawson's Cypress in a garden [Pencraig, near Ross-on-Wye, VC36. 15 September 2010. HN16:13]
- Beating a mature Lawson Cypress (*Chamaecyparis lawsoniana*) in a garden [Park Mill, Gower, South Wales. 25 September 1982. Adults and nymphs. EMM119:220]
- On Crataegus [Ashridge, near Berkhamsted, Hertfordshire. 2 October 1933. LondonHets]
- Beating *Chamaecyparis nootkatensis* [Imperial College Field station, Ascot, Berkshire. 5 October 1962. Adults and nymph. EMM98:250]

Beating mature female junipers (*Juniperus communis*) bearing berries at altitude 230-260m [Near Hopes Reservoir, Lammermuir Hills, VC82. 4 October 2009. Adults and nymphs. ERJV122:154]

From vegetation under a Lawson Cypress (*Chamaecyparis lawsoniana*) in a garden [Castleknock, County Dublin. 9 October 1995. EMM132:314]

On a wall along the river [Thames Marshes, Belvedere, Kent. 12 October 1984. ERJV101:47-49] Sweeping Lawson's cypress [Brenchley Gardens, Peckham, Surrey. 17 October 1996.

BJENH10:177]

On Lawson's cypress [Croft Pascoe Plantation, Goonhilly Downs, Cornwall. 17 October 2004. CornwallHets]

On clothes after collecting on hazel bushes [Imperial College Biological Field Station, Slough. 22 October 1935. JSBE1:165-166]

On juniper [Riddlesdown, Surrey. 11 November 1951. LondonHets]

Blasted out of *Thuja plicata* in a blizzard [Bredon Hill, Worcestershire. 9 December 1990. EMM129:60]

Frozen out of a *Sequoiadendron giganteum* in a garden [Little Comberton, Worcestershire. 18-19 December 2010. EMM147:105-110]

Frozen out of a *Chamaecyparis lawsoniana* [Wick, Worcestershire. 18-19 December 2010. EMM147:105-110]

Frozen out of a *Cedrus deodara* in a garden [Wick, Worcestershire. 18-19 December 2010. EMM147:105-110]

Inside a window of a house [Carshalton Beeches, Surrey. 25 December. ERJV96:187]

In house [Launceston, Cornwall. 25 December 2006. CornwallHets]

In the heart of a 'Webbs Wonderful' lettuce [Southern half of England. 25 December 1980. HSGN7:6]

In garden [Angarrack, Cornwall. 1991, 1993, 1994, 2004 & 2005. CornwallHets]

Indoors [Banbury, Oxfordshire. HSGN5:7]

Beating juniper bushes [Boxhill. PSLENHS1897:147]

Juniper bushes [Boxhill and Mickleham. Saunders 1892]

On *Chamaecyparis lawsoniana* [Brownsea Island, Poole Harbour, Dorset. 2006-2007. EG60:37-71]

In a greenhouse [Buckinghamshire. November. HSGN5:7]

In ivy [Buckinghamshire. October. HSGN5:7]

Sweeping heather [Clowse Wood, Warwickshire. October. HSGN5:7]

On cultivated conifers Nootka Cypress (*Xanthocyparis nootkatensis*) and Lawson's Cypress (*Chamaecyparis lawsoniana*) [Dublin City. HN21:9]

Beating Lawson's cypress [Frimley, Surrey. Adults and nymphs. HSGN9:5]

Sweeping Lawson's Cypress (*Chamaecyparis lawsoniana*) [Grounds of Quaker Meeting House, Brentford, West London. September 2010. HN16:6]

On juniper [Headley Lane, Surrey. 1893. LondonHets]

Indoors [Hinckley, Leicestershire. December. HSGN5:7]

Fogged with insecticide from the canopy of mature oaks [Isabella plantation, Richmond Park, Surrey. 1984. HSGN5:7]

Beating Juniper (*Juniperus communis*) [Lammermuir Hills, south of Edinburgh. April 2007. HN9:11]

On upright Junipers around a lough [Lough Derg, Co Tipperary, HN19/20:7]

On a Lawson Cypress (*Chamaecyparis lawsoniana*) hedge in a garden [Near Farnham, Surrey. September 1972. EMM109:180]

On young junipers on chalk hills [Near Tring. September 1899. EMM35:270]

Under *Chamaecyparis* [Oxfordshire. HSGN5:7]

Feeding on the developing female cones of a tall hedge of Lawson's cypress (*Chamaecyparis lawsoniana*) [RHS Garden, Wisley, Surrey. BJENH8:78]

Beating juniper [Salisbury. PSLENHS1903:63]

Breeding on Chamaecyparis lawsoniana [South Worcestershire. 1983. EMM124:193-194]

On Thuja plicata and Calocedrus decurrens [South Worcestershire. Adults. EMM124:193-194]

Among the lower leaf-stalks of a 'January King' cabbage [Southern half of England. Late October. HSGN7:6]

From *Thuja plicata*, *Chamaecyparis lawsoniana*, *Calocedrus decurrens* [Southern half of England. HSGN7:6]

On juniper [Stockbridge Down, Hampshire. PTBENHS13:133]

On Chamaecyparis nootkatensis [Surrey. Adults. HSGN7:6]

On Chamaecyparis lawsoniana and Thuja [Surrey. Nymphs. HSGN7:6]

From juniper [Wendover. PSLENHS1903:3-6]

On native juniper [Witherslack area, VC69. HSGN7:6]

In conifer screens [Worcestershire. 1980-1983. HSGN7:6]

Sweeping beneath oak [Wyre Forest. HSGN5:7]

## Elasmostethus interstinctus (Linnaeus) (Acanthosomatidae)

Under bark on dead beech [Oakley Wood, Gloucestershire. 26 January 1985. GloucsHets]

Under bark [Glenealy, Co Wicklow. 2 April 1932. IrelandHets]

On juniper [Headley Lane, Surrey. 21 May 1904. LondonHets]

Beating birch [Seal Chart, Sevenoaks, Kent. 21 May 2005. BJENH19:133-135]

Beating Betula [Weybridge, Surrey. 25 May 1947. LondonHets]

On birch [Boxhill, Surrey. 28 May 1916. LondonHets]

On wych elm [Standish Wood, Gloucestershire. 4 June 1985. GloucsHets]

On birch [Wimbledon Common, Surrey. 3 June 1910. LondonHets]

On Juncus [Aspley Wood, Bedfordshire. 18 June 1944. EMM81:183-185]

On aspen (*Populus tremula*) [Glen Glass, Easter Ross. 17 June 1951. EMM87:255]

Sweeping/beating [Great Pen Wood, VC12. 25 June 2015. Hem3:53]

On aspen (*Populus tremula*) [Strathspey, Morayshire. 25 June 1951. EMM87:255]

On birch [Epping Forest, Essex. 30 June 1886. LondonHets]

Beating young birch. Parasitised by the tachinid *Subclytia rotundiventris* [Esher Common, Surrey. 26 June 1964. Male. EMM102:198]

Beating [Oxshott Heath, Surrey. 30 June 1951. LondonHets]

On a Betula leaf [Flitwick Moor, Bedfordshire. 25 July 1948. Nymphs. EMM86:6-8]

From Birch (*Betula*) [Vale Park, Aylesbury, Buckinghamshire. 2 August 2015. Nymphs reared in culture. Hem3:126]

From Ivy (*Hedera*) around the trunk of an oak (*Quercus*) [Clifton Heath, Oxfordshire. 15 August 2014. Hem2:58]

Off birches [Hampstead Heath, Middlesex. 15 August 1943. EMM81:163-164]

On birch [Cooper's Hill, Amphill, Bedfordshire. 1 September 1945. EMM86:6-8]

On birch. In culture, became adult 5 days later [Near Yarmouth, Isle of Wight. 3 September 1923. Nymph. EMM60:117-118]

On oak [King's Wood, Bedfordshire. 9 September 1944. EMM86:6-8]

On birch [Coombe Woods, Surrey. 13 September 1882. LondonHets]

From birch [Epping Forest. 14 September 1897. EMM34:13-15]

At MV trap [Freshwater, Isle of Wight. 11 September 1992. BJENH6:77]

On birch on edge of heath [Heath and Range, near Shire Oak, Bedfordshire. 14 September 1944. EMM81:183-185]

On birch [Nagshead Dean, Gloucestershire. 14 September 1991. GloucsHets]

On oak [West Wickham, Kent. 20 September 1899. LondonHets]

On stand of exotic alders [Duchy College, Rosewarne, Cornwall. 25 September 2004. CornwallHets]

From birch [Epping Forest. 25 September 1897. EMM34:13-15]

On birch (*Betula*). Parasitised by the tachinid *Subclytia rotundiventris*. A white egg was under the end of the abdomen, the larva emerged and pupated two weeks later, and the adult emerged after another two weeks [Near Addington, Surrey. 24 September 2001. BJENH15:172]

On birch [Leighton Buzzard Pits, Bedfordshire. 29 September 1945. EMM86:6-8]

On Betula alba [Berkhamsted Common, Hertfordshire. 2 October 1935. LondonHets]

On Betula pubescens [Tregaron Bog, Cardiganshire. 2 October 1954. Males. EMM92:54-64]

In woodland [Darland's Lake NR, Totteridge, Hertfordshire. 7 October 1984. LondonHets]

On ivy [Clara, Co Wicklow. 23 November 1930. IrelandHets]

On oak [Abbey Wood, Kent. 1898. LondonHets]

On poplar and fir [Bentley Woods, Suffolk. SuffolkHets]

In garden [Bodmin, Cornwall. CornwallHets]

Mountain ash [Bray district, Co Wicklow. IrelandHets]

In a wood [Dinnet Oak Wood, Braemar, Aberdeenshire. August 1971. EMM107:255-256]

On birch [Dumfriesshire. September 1934. EMM71:164]

Beating Scotch Firs [Dumfriesshire. Spring 1935. Dead specimens. EMM71:164]

Among moss on boulders in a wood [Glendalough, Co Wicklow. April. IrelandHets]

On birch [Glendalough, Co Wicklow. September 1905. IrelandHets]

On birch [Grounds of Pest Infestation Laboratory, Slough. September 1950. Adults and nymphs. EMM87:103]

On birch and hazel [Hartlebury Common LNR, Worcestershire. EMM133:17-26]

Woodland [Ireland. IrelandHets]

Fogged with insecticide from the canopy of mature oaks [Isabella plantation, Richmond Park, Surrey. 1984. Including adults. HSGN5:6]

On birch [Kinloch, Isle of Rhum. 1960. TSBE18:91-167]

On birch [Muckross Demesne, North Kerry. September 1925. Adult and nymph. IrelandHets]

Birch and other trees [Norfolk. Saunders1892]

From naturally vegetated derelict land [North-west England. 1987-1988. EG43:221-226]

On birch [Nutberry Moss, Dumfriesshire. September. EMM70:162]

On birch [Peterborough district. EG20:125-135]

Beating birch [Reading district. 1940. EMM77:101-104]

On birch [Red River Trail near Menadarva, Cornwall. 2004. CornwallHets]

In a light trap [Rothamsted Experimental Station, Harpenden. 1949. Female. TRESL112:173-220]

In a Rothamsted light trap on the roof of a building [School of Agriculture, Bangor, Gwynedd. EMM123:76]

On oaks [Shooter's Hill, Blackheath, Kent. LondonHets]

In Malaise traps in birch woodland [Silwood Park, Ascot. 1991. BJENH20:49-55]

On birch [Silwood Park, Berkshire. BJENH28:5-15]

From Betula pubescens/pendula [Skipwith Common, VC61. 1981/82. EcolEnt10:159-169]

On birch [Toomie's Wood, North Kerry. July 1927. IrelandHets]

In moss at the roots of grass tufts [Tuddenham and Barton Mills, Suffolk. April 1935.

EMM71:141-142]

On birch [Tuddenham Fen, Suffolk. SuffolkHets]

## Elasmucha ferrugata (Fabricius) (Acanthosomatidae)

On raspberry in a garden [Derby. June 1903. EMM40:38]

In the kitchen of a house [Glossop, Derbyshire. Female. EMM86:233]

Sweeping low herbage [Ogwen Valley, near Bangor, Wales. July 1899. EMM36:131-132]

## Elasmucha grisea (Linnaeus) (Acanthosomatidae)

In Abies [Colne Valley, Uxbridge. 6 March 1934. Ent71:148-153]

On birch [Headley Lane, Surrey. 14 May 1894. LondonHets]

On Betula [Pickworth, Rutland. 13 May 1932. EMM68:213-214]

On Salix caprea [Flitwick Moor, Bedfordshire. 19 May 1945. EMM86:6-8]

On birch [Wimbledon Common, Surrey. 25 May 1893. LondonHets]

On birch [Exeter. 4 June 1871. Female. EMM9:13]

On birch [Exeter. 6 June 1871. Female and eggs. EMM9:13]

On Betula pubescens [West Wickham, Kent. 9 June 1969. LondonHets]

On birch in a garden. An adult on the underside of a leaf standing over a number of nymphs and egg shells [Exeter. 19 June 1870. Adult and nymphs. EMM7:53-55]

On birch in a garden on the underside of a leaf [Exeter. 23 June 1870. Adult and nymphs. EMM7:53-55]

On birch in a garden on a leaf stalk and twig [Exeter. 25 June 1870. Adult and nymphs. EMM7:53-55]

Beating young birch [Esher Common, Surrey. 26 June 1964. EMM102:198]

On birch. Female standing over nymphs [Exeter. 29 June 1871. Female and nymphs. EMM9:13]

On grass on a heathy patch. It had a Tachinid egg on the left side of the pronotum, and was kept alive in culture. It was found dead on 12 July with its body empty. In early September it was noticed the fly had emerged and was dead and mouldy, a male *Subclytia rotundiventris* [Silwood Park, Berkshire. 30 June 1954. Male. EMM91:47]

On *Betula pendula* [Berkhamsted Common, Hertfordshire. 5 July 1934. Female and nymphs. LondonHets]

On birch [Exeter. 3 July 1871. Nymphs. EMM11:42-43]

On birch [Flitwick Moor, Bedfordshire. 2 July 1944. EMM86:6-8]

On birch [Exeter. 6 July 1871. Nymphs. EMM11:42-43]

On birch [Exeter. 9 July 1871. Female and nymphs. EMM9:13]

On birch. Nymphs starting to move off the leaf where the eggs were laid [Exeter. 13 July 1871. Female and nymphs. EMM9:13]

On *Rubus fruticosus* [Imperial College Biological Field Station, Slough. 20 July 1934. TSBE2:47-67]

On privet hedge [Luton, Bedfordshire. 17 July 1945. Nymph. EMM86:6-8]

On an alder. An egg was attached to the bug, the larva emerging from the bug and pupating soon afterwards. After two weeks, an adult *Subclytia rotundiventris* emerged [Frimley, Surrey. 7 August 2003. BJENH17:243]

On birch [Baker's Wood, Heath and Reach, Bedfordshire. 11 August 1945. EMM86:6-8]

From Ivy (*Hedera*) around the trunk of an oak (*Quercus*) [Clifton Heath, Oxfordshire. 15 August 2014. Hem2:58]

Off birches [Hampstead Heath, Middlesex. 15 August 1943. EMM81:163-164]

Beating exotic birch. A female was sitting over a batch of nymphs [Wandsworth Common, London. 13 August 2006. Adults and nymphs. BJENH20:213-216]

On birch, *etc*, by roadside [Blackhafields Plantation, Ampthill, Bedfordshire. 20 August 1948. Adults. EMM86:6-8]

Oak [Blackheath, Kent. 30 August 1936. LondonHets]

On birch [Headley Lane, Surrey. 29 August 1896. LondonHets]

On grass [Deadmansea Wood, Bedfordshire. 3 September 1944. EMM86:6-8]

On birch [Ampthill, Bedfordshire. 7 September 1946. EMM86:6-8]

In gardens [Duchy College, Rosewarne, Cornwall. 9 September 2006. CornwallHets]

From birch [Epping Forest. 14 September 1897. EMM34:13-15]

On birch on edge of heath [Heath and Range, near Shire Oak, Bedfordshire. 14 September 1944. EMM81:183-185]

On birch [Shirley Common, Surrey. 14 September 1895. LondonHets]

From birch [Epping Forest. 25 September 1897. EMM34:13-15]

On Betula pubescens [Tregaron Bog, Cardiganshire. 2 October 1954. Males. EMM92:54-64]

On sallow [Oldhill Wood, Whipsnade, Bedfordshire. 10 October 1944. EMM81:183-185]

On underside of birch leaf [Bookham Common, Surrey. 14 October 1956. Nymphs reared in culture. LondonHets]

On oak and birch [Mitcham Common, Surrey. 24 October 1983. LondonHets]

On oak [Arbrook Common, Surrey. 8 November 1933. LondonHets]

On oak [Oxshott, Surrey. 8 November 1933. LondonHets]

On birch [Assington Thicks, Suffolk. SuffolkHets]

On sallow [Bentley Woods, Suffolk. SuffolkHets]

In a dead crow's head [Bentley Woods, Suffolk. SuffolkHets]

Parasitised by the tachinid *Subclytia rotundiventris* [Berkshire. S&L1959]

In garden [Bodmin, Cornwall. CornwallHets]

Beating birch [Broad Oak, East Sussex. July 1936. EMM72:258-259]

On broad-leaved trees [Brownsea Island, Poole Harbour, Dorset. 2006-2007. EG60:37-71]

On birch [Castlemartyr, East Cork. August 1933. Adult. IrelandHets]

On box [Coddenham, Suffolk. SuffolkHets]

In a wood [Dinnet Oak Wood, Braemar, Aberdeenshire. August 1971. EMM107:255-256]

On birch [Dumfriesshire. September 1934. EMM71:164]

Beating Scotch Firs [Dumfriesshire. Spring 1935. Dead specimens. EMM71:164]

On birches [Epping Forest, Essex. LondonHets]

In the gizzards of Great Tits, a Blue Tit and Coal Tits [Forest of Dean, Gloucestershire. 1948-1951. Adult. EMM92:68-71]

On Birch [Hampstead Heath. PTSLENHS1949-50:36-38]

On alder, birch and mugwort [Hartlebury Common LNR, Worcestershire. EMM133:17-26]

Fogged with insecticide from the canopy of mature oaks [Isabella plantation, Richmond Park, Surrey. 1984. Including adults. HSGN5:6]

On birch [Kidbrook, Kent. 1897. LondonHets]

On birch [Lee, Kent. 1897. LondonHets]

On birch [Macmine, Co Wexford. August 1931. Nymph. IrelandHets]

Beating birch [Near East Butsfield, County Durham. September 1955. Ent91:45]

Beating birch [Reading district. 1940. EMM77:101-104]

On birch [Red River Trail near Menadarva, Cornwall. 2004. CornwallHets]

On birch [Shelton Abbey, Arklow, Co Wicklow. September 1928. IrelandHets]

On birch [Shooter's Hill, Blackheath, Kent. LondonHets]

In Malaise traps in birch woodland [Silwood Park, Ascot. 1991. BJENH20:49-55]

From Betula pubescens/pendula [Skipwith Common, VC61. 1981/82. EcolEnt10:159-169]

Beating Scots pine/spruce [Tuddenham and Barton Mills, Suffolk. April 1935. EMM71:141-142]

On birch [Tuddenham, Suffolk. May 1965. PTSLENHS1965:83]

On Betula alba [Uxbridge, Middlesex. Ent71:148-153]

In a garden [Warwickshire. HN7:11]

On birch [Westmorland, TSBE15:117-134]

On Scrophularia [Wimbledon Common, Surrey. Nymph. LondonHets]

On the surface of a lake, predated by *Gerris najas* [Wray Castle, Windermere, Furness (Watsonian Westmorland). September 1946. EMM85:169-173]

## **Bibliography**

Acanthosoma haemorrhoidale (Linnaeus) (Acanthosomatidae)

as A. haemorrhoidale EMM81:253-273

as Ac. haemorrhoidale EMM91:7-27

as Acanthosoma haemorrhoidale BJENH18:233-252, BJENH27:81-91, BJENH29:122-125, BJENH32:239-240, BJENH5:93-94, BJENH6:77, Butler1923, CornwallHets, D&S1865, EG13:54, EG20:125-135, EG60:37-71, EMM133:17-26, EMM147:105-110, EMM149:165-180, EMM26:81-82, EMM29:35-37, EMM35:270, EMM44:22-29, EMM51:220, EMM58:231, EMM61:253-257, EMM65:17, EMM68:213-214, EMM69:234-245, EMM71:113-114, EMM77:101-104, EMM78:200-202, EMM81:12, EMM81:183-185, EMM83:59-61, EMM85:193-206, EMM85:249-253, EMM85:308, EMM86:6-8, EMM86:95, EMM87:103, EMM87:201, EMM87:308, EMM87:7, EMM88:162, EMM91:237, EMM92:54-64, EMM92:68-71, EMM93:49-51, EMM96:144, Ent30:78, Ent47:146-147, Ent60:283-284, Ent71:148-153, Ent89:223-231, ERJV111:27-35, ERJV99:83, GloucsHets, HantsHets, Hem1:2, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem2:30, Hem2:40, Hem2:49, Hem3:1, Hem3:103, Hem3:126, Hem3:22, Hem3:23, Hem3:39, Hem3:74, Hem3:83, Hem4:1, Hem4:101, Hem4:130, Hem4:146, Hem4:17, Hem4:26, Hem4:67, Hem4:85, Hem5:1, Hem5:101, Hem5:119, Hem5:138, Hem5:159, Hem5:16, Hem5:191, Hem5:205, Hem5:25, Hem5:39, Hem5:53, Hem5:69, Hem5:92, Hem6:237, Hem6:6, HN10:11, HN10:13, HN17/18:26, HN7:11, HN7:14, HN9:15, HN9:3, HSGN1:12, HSGN1:14, HSGN1:8, HSGN11:13, HSGN13:10, HSGN5:3, HSGN5:7, HSGN7:2, HSGN8:3, IrelandHets, LondonHets, PRESL(A)13:19-24, PSLENHS1899:73, PSLENHS1931-32:56, PTBENHS18:79, PTSLENHS1933-34:32-33, PTSLENHS1949-50:36-38, PTSLENHS1949-50:78, PTSLENHS1950-51:77-78, PTSLENHS1951-52:68-69, PTSLENHS1952-53:78-79,

PTSLENHS1953-54:91-92, PTSLENHS1954-55:77-78, PTSLENHS1962:123-183, S&L1959, Saunders1892, SuffolkHets, Synopsis1875, TRESL112:173-220, TSBE1:51-84, TSBE11:245-280, TSBE15:117-134, TSBE16:1-48, TSBE18:91-167, TSBE2:47-67

as *Acanthosoma haemorrhoidalis* EMM29:191-192, Ent32:99, Ent52:24, ERJV31:60, PTBENHS4:127-128

## Cyphostethus tristriatus (Fabricius) (Acanthosomatidae)

- as Acanthosoma picta EMM8:60-63
- as Acanthosoma pictum D&S1865
- as Acanthosoma tristriata EMM8:60-63, Ent36:325
- as *Acanthosoma tristriatum* EMM33:263, EMM35:270, EMM39:17-18, EMM43:196-202, EMM69:234-245, Ent30:326, JSBE1:165-166, PSLENHS1897:147, PSLENHS1903:3-6, PSLENHS1903:63, PSLENHS1922-23:115, Saunders1892, Synopsis1875
- as C. tristriatus EMM81:253-273, EMM82:94-95
- as Cryphostethus tristriatus BJENH8:78
- as Cyph. tristriatus EMM91:7-27
- as Cyphostethus tristiatus HantsHets
- as Cyphostethus tristriatus BJENH12:243, BJENH15:180, BJENH16:102, BJENH20:123-125, Butler1923, EMM109:180, EMM119:220, EMM142:52, EMM147:105-110, EMM57:30, EMM93:49-51, EMM98:250, Ent57:90, ERJV101:47-49, ERJV103:296, ERJV109:261, ERJV112:133-134, ERJV121:5-6, ERJV122:154, ERJV123:53-54, ERJV124:183-184, ERJV96:187, ERJV99:83, Hem1:2, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem2:30, Hem2:40, Hem2:41, Hem2:58, Hem3:1, Hem3:103, Hem3:126, Hem3:129, Hem3:22, Hem3:23, Hem3:39, Hem3:74, Hem3:83, Hem3:92, Hem4:1, Hem4:101, Hem4:130, Hem4:151, Hem4:26, Hem4:67, Hem4:85, Hem5:1, Hem5:101, Hem5:119, Hem5:135, Hem5:138, Hem5:148, Hem5:159, Hem5:16, Hem5:191, Hem5:25, Hem5:39, Hem5:53, Hem5:69, Hem5:92, Hem6:218, Hem6:253, Hem6:254, Hem6:256, Hem6:263, Hem6:271, Hem6:276, Hem6:6, HN16:13, HN16:6, HN17/18:22, HN17/18:26, HN19/20:7, HN21:9, HN9:11, HSGN6:3, IrelandHets, JESSE1:57, LondonHets, PTBENHS13:133, PTBENHS18:20, PTBENHS18:20, PTBENHS18:79, PTSLENHS1951-52:43-44, PTSLENHS1962:123-183, S&L1959, TSBE11:245-280, TSBE16:1-48
- as *Elasmostethus tristriatus* BJENH10:122, BJENH10:177, BJENH18:233-252, CornwallHets, EG60:37-71, EMM124:193-194, EMM128:136, EMM129:60, EMM132:314, ERJV113:13-16, ERJV121:5-6, GloucsHets, HN2:1, HSGN11:13, HSGN13:10, HSGN3:9, HSGN4:5, HSGN4:A9, HSGN5:7, HSGN6:1, HSGN7:6, HSGN9:5, LondonHets

## Elasmostethus interstinctus (Linnaeus) (Acanthosomatidae)

- as *Acanthosoma dentatum* D&S1865, EMM14:165-167, EMM29:35-37, EMM34:13-15, EMM43:196-202, EMM44:22-29, EMM69:234-245, Ent33:10, Ent91:45, PSLENHS1901:11-14, Saunders1892, SuffolkHets, Synopsis1875
- as *Acanthosoma interstinctum* Butler1923, EMM78:200-202, EMM83:59-61, Ent47:146-147, ERJV51:160-161, IrelandHets
- as Clinocoris interstinctus EMM21:276, EMM22:37-39
- as E. interstinctus EMM81:253-273, EMM82:94-95
- as El. interstinctus EMM91:7-27
- as *Elasmostethus interstinctum* EMM36:131-132
- as *Elasmostethus interstinctus* BJENH13:244-245, BJENH15:172, BJENH17:248-252, BJENH18:233-252, BJENH19:133-135, BJENH20:49-55, BJENH28:240, BJENH28:5-15, BJENH6:77, BJENH9:170, CornwallHets, EcolEnt10:159-169, EG20:125-135, EG43:221-226, EG60:37-71, EMM102:198, EMM102:70-72, EMM107:255-256, EMM123:76, EMM133:17-26, EMM60:117-118, EMM64:218, EMM70:162, EMM71:141-142, EMM71:164, EMM74:20-21, EMM77:101-104, EMM81:163-164, EMM81:183-185, EMM86:6-8, EMM87:103, EMM87:255, EMM87:308, EMM87:7, EMM88:162, EMM92:221-225, EMM92:54-64, ERJV111:27-35, GloucsHets, HantsHets, Hem1:2, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem2:30, Hem2:40, Hem2:41, Hem2:58, Hem3:1, Hem3:126, Hem3:22,

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## Elasmucha ferrugata (Fabricius) (Acanthosomatidae)

- as Clinocoris ferrugatus EMM22:37-39
- as E. ferrugata EMM81:253-273
- as El. ferrugata EMM91:7-27
- as *Elasmostethus ferrugatus* Butler1923, EMM36:131-132, EMM40:38, EMM43:196-202, EMM44:22-29, EMM55:17, EMM64:109-113, EMM86:233, HantsHets
- as *Elasmucha ferrugata* EMM86:233, Hem1:2, Hem1:40, Hem1:41, Hem1:92, Hem3:1, Hem4:1, Hem4:67, Hem4:85, Hem5:1, Hem5:101, Hem6:7, HN17/18:20, HN19/20:11, HN9:4, HN9:6, HN9:7, HSGN1:18, HSGN1:4, HSGN8:8, S&L1959

## Elasmucha grisea (Linnaeus) (Acanthosomatidae)

- as Acanthosoma grisea EMM7:53-55, PSLENHS1900:6-14
- as *Acanthosoma griseum* D&S1865, EMM11:42-43, EMM14:165-167, EMM9:13, Ent34:135, PSLENHS1901:11-14, Synopsis1875
- as *Acanthosoma interstinctum* EMM29:35-37, EMM34:13-15, EMM43:196-202, EMM44:22-29, EMM52:66, EMM69:234-245, Ent33:10, Ent91:45, ERJV34:206, HantsHets, PSLENHS1922-23:108, Saunders1892, SuffolkHets
- as Clinocoris griseus EMM21:276, EMM22:37-39, EMM23:43-44
- as E. grisea EMM81:253-273
- as El. grisea EMM91:7-27
- as Elasmostethus grisea Butler1923, EMM64:218, EMM72:258-259
- as *Elasmostethus griseus* EMM51:145-146, EMM68:213-214, Ent47:146-147, Ent71:148-153, Ent72:272, ERJV51:160-161, HantsHets, IrelandHets, PTSLENHS1935-36:27-28, PTSLENHS1936-37:35-36, PTSLENHS1937-38:51, TSBE2:47-67
- as Elasmucha grisea BJENH12:243, BJENH14:239, BJENH17:243, BJENH18:233-252, BJENH20:213-216, BJENH20:49-55, BJENH21:187-192, BJENH27:13-19, BJENH28:5-15, BJENH4:178, BJENH9:170, CornwallHets, EcolEnt10:159-169, EG20:125-135, EG60:37-71, EMM102:198, EMM107:255-256, EMM132:314, EMM133:17-26, EMM70:162, EMM71:141-142, EMM71:164, EMM77:101-104, EMM81:163-164, EMM81:183-185, EMM85:169-173, EMM85:193-206, EMM86:6-8, EMM87:308, EMM87:7, EMM91:47, EMM92:221-225, EMM92:54-64, EMM92:68-71, ERJV111:27-35, ERJV99:83, GloucsHets, Hem1:2, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem2:30, Hem2:58, Hem3:1, Hem3:103, Hem3:129, Hem3:22, Hem3:23, Hem3:39, Hem3:74, Hem3:83, Hem3:92, Hem4:1, Hem4:101, Hem4:130, Hem4:18, Hem4:26, Hem4:67, Hem4:85, Hem5:1, Hem5:101, Hem5:119, Hem5:138, Hem5:14, Hem5:159, Hem5:16, Hem5:191, Hem5:205, Hem5:25, Hem5:39, Hem5:53, Hem5:69, Hem5:92, Hem6:237, Hem6:7, HN17/18:26, HN7:11, HSGN1:13, HSGN1:14, HSGN1:8, HSGN10:12, HSGN11:13, HSGN11:7, HSGN12:12, HSGN13:10, HSGN3:11, HSGN5:6, HSGN6:3, HSGN7:2, HSGN8:3, LondonHets, PTBENHS4:122-123, PTSLENHS1949-50:36-38, PTSLENHS1949-50:71-73, PTSLENHS1949-50:78, PTSLENHS1950-51:67, PTSLENHS1950-51:78-79, PTSLENHS1951-52:68-69, PTSLENHS1951-52:72-73, PTSLENHS1956:111-136, PTSLENHS1956:83-84, PTSLENHS1962:123-183, PTSLENHS1963Part1:67, PTSLENHS1963Part1:69-70,

PTSLENHS1965:83, S&L1959, TRESL112:173-220, TSBE1:51-84, TSBE11:245-280, TSBE15:117-134, TSBE16:1-48, TSBE8:1-42 as *Elasmucha interstinctus* ERJV13:59-62

#### **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vicecounty Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above. Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

### Acanthosoma haemorrhoidale (Linnaeus) (Acanthosomatidae)

Common name. The Hawthorn Shieldbug.

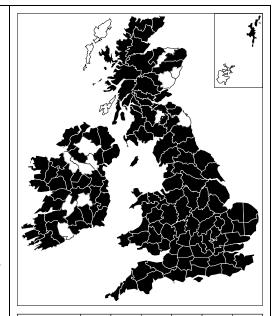
First report. D&S1865 as Acanthosoma haemorrhoidale.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from a variety of trees and shrubs, including hawthorn (n), blackthorn (n), oak (n), birch (n), aspen, rowan (n), tamarisk (n), ash, sallow, willow, elder, elm, wych elm, Laurustinus, apple, cypress, whitebeam, rhododendron and tree cotoneaster (n); and other plants, including mistletoe (n), brambles, flowers/seeds of stinging nettle and asparagus. It has been found under and in crevices of the bark of oak (w), beech (w) and hawthorn (w), under moss, in a Deschampsia tuft and in leaf litter and compost. It has also been taken at light. It has been removed from the gizzards of Great Tit and Coal Tit; and has been parasitised with tachinids (n), including Lophosia fasciata. In culture with sprigs of hawthorn, it has been seen to feed on the berries (n) and leaves, and drink from drops of water.



	1-5	6-10	11-15	16-20	21-25	26-
January			3	1	1	2
February			1	2	3	
March			2	1	3	1
April	4	2	5	3	2	3
May	3	3	2	6	6	8
June	8	1	4	6	2	3
July	1		1	1 N		
August	2 N	3 N	5 N	7 N	2 N	8 N
September	8 N	5	5 N	13	6	5 N
October	10	5 N	8	5	3	6
November	1		4	3		1
December	1			3	1	1



## Cyphostethus tristriatus (Fabricius) (Acanthosomatidae)

Common name. The Juniper Shieldbug.

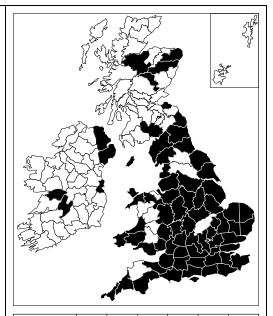
First report. D&S1865 as Acanthosoma pictum.

Ambiguities. None reported.

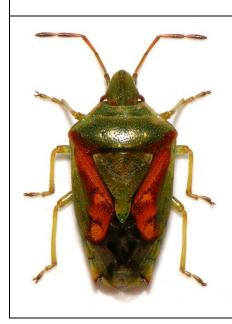
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from a variety of evergreens, including juniper (n, w), Lawson's cypress (n), chinese thuja, red-cedar (w), nootka cypress (n), wellingtonia, Cedrus deodara and ivy. It has also been fogged with insecticide from the canopy of a mature oak. Feeding has been observed on the developing female cones of Lawson's cypress.



	1-5	6-10	11-15	16-20	21-25	26-
January	1					
February		1				
March						2
April		1	1	1		1
May	1	2	2	2	1	1
June	1	1	2	2		
July	2	5			1	1
August	1	2 N	2 N	3	N	
September	1 N		3	N	3 N	2
October	7 N	1	2	4	1	
November	1	1	1			
December		1		3	3	



## Elasmostethus interstinctus (Linnaeus) (Acanthosomatidae)

Common name. The Birch Shieldbug.

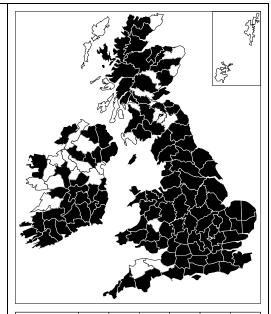
First report. D&S1865 as Acanthosoma dentatum.

Ambiguities. Between Saunders1892 and Butler1923 the name *Acanthosoma interstinctum* is likely to refer to *Elasmucha grisea* (Hem5:14-15).

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily from birch (n), but also from juniper, wych elm, Juncus, aspen, oak, alder, ivy, oak, poplar, Scots pine, rowan and moss. It has been fogged with insecticide from the canopy of a mature oak; and has been taken at light and in a Malaise trap. There is a winter record from under the bark of a dead beech tree. It has been found parasitised by the tachinid Subclytia rotundiventris.



	1-5	6-10	11-15	16-20	21-25	26-
January						1
February						
March						
April	1				1	2
May	1	1	2	1	4	2
June	3	1	1	6	2	3
July	2		1	1	1 N	3
August	1 N	3	4	7	2 N	3
September	4 N	5	5	5	6	2
October	3	2		2		
November		1			1	
December						



## Elasmucha ferrugata (Fabricius) (Acanthosomatidae)

Common name. The Bilberry Shieldbug.

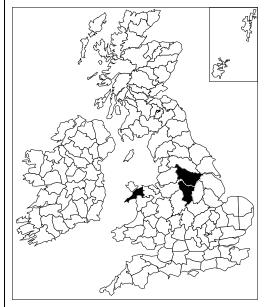
First report. EMM36:131-132 as  $\it Elasmostethus ferrugatus.$ 

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sweeping low herbage, on raspberry in a garden and in the kitchen of a house. The last record may derive from imported produce.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						

No habitus images are available.

## Elasmucha grisea (Linnaeus) (Acanthosomatidae)

Common name. The Parent Shieldbug.

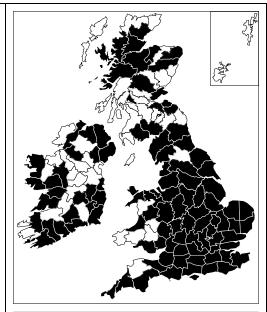
First report. D&S1865 as Acanthosoma griseum.

Ambiguities. None reported.

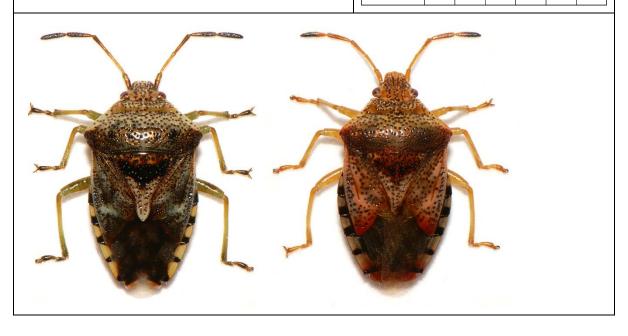
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily from birch (n, e), but also recorded from sallow, bramble, privet (n), alder, ivy, oak, box, Scots pine, Abies (w), mugwort and Scrophularia (n). The adults have been observed standing over eggs and nymphs. It has also been found in a dead crow's head and has been taken in a Malaise trap. It has been removed from the gizzards of Great Tit, Blue Tit and Coal Tit; and has been seen on the surface of a lake predated by Gerris najas. It has been found parasitised with the tachinid Subclytia rotundiventris.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March		1			1	
April	1				1	4
May		3	9	4	4	1
June	8	4 E	2	5 N	3 N	4 N
July	3 N	4 N	1 N	3 N	1	
August		4	8 N	7	2	4
September	3	4	6	4	3	
October	3	1	N		1	
November	1	2				
December						



## A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (4) THE FAMILY CYDNIDAE

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### Introduction

This is the fourth part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Cydnidae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

## **Heximonth records**

Adomerus biguttatus (Linnaeus) (Cydnidae)

04C: 11 April 1953 [Hodgemoor Wood, Buckinghamshire. EMM90:250] 11 April 1954 [Hodgemoor Wood, Buckinghamshire. EMM90:250]

04E: 24 April 1954 [Stoke Common, Buckinghamshire. EMM90:250]

05B: 7 May 1985 [Am Beanaidh, near Coylumbridge, Aviemore, VC96. Male and female. BJENH32:321-325] 7 May 1950 [Kincraig, VC96. BJENH32:321-325]

05F: 27 May 1950 [Church Woods, Blean, Kent. EMM86:224]

06C: 14 June 1990 [Hembury Woods, South Devon. BJENH4:119-121]

07E: 25 July 1990 [Heddon's Mouth Wood, North Devon. BJENH4:119-121] 24 July 1990 [Parsonage Wood, North Devon. BJENH4:119-121]

08B: 6 August 1959 [Pamber Forest, Hampshire. Adults. EMM96:4] 6 August 1959 [Pamber Forest, Hampshire. Adults and nymphs. EMM96:4]

09F: 26 September 1941 [Pamber Forest, Hampshire. Nymphs. EMM82:24] 27 September 1888 [Shere, Surrey. LondonHets]

10C: 13 October 1949 [Kincraig, VC96. BJENH32:321-325]

Canthophorus impressus (Horváth) (Cydnidae)

01C: 13 January 1952 [White Down, near Dorking, Surrey. Adults. EMM88:93]

03F: 26 March 2012 [Great Cheverell Hill, Salisbury Plain, Wiltshire. BJENH25:84]

04A: 5 April 2012 [Great Cheverell Hill SSSI, Salisbury Plain, VC8. HN19/20:11]

- 04B: 8 April 1961 [Whitedown, near Abinger, Surrey. LondonHets] 8 April 1962 [Whitedown, near Boxhill, Surrey. Adults and nymphs. LondonHets]
- 04C: 15 April 2013 [Southerham Downs, VC14. Adults. HN21:4]
- 05A: 3 May 1953 [Abinger, Surrey. Male. LondonHets] 3 May 2008 [Durlston Country Park, Swanage, Dorset. HN11:11]
- 05D: 19 May 2000 [Hartslock NR, near Goring, Oxfordshire. Males. EMM138:148] 20 May 1997 [Ventnor Downs, Isle of Wight. BJENH11:110]
- 05E: 23 May [Near Sheep Lees, Horsley, Surrey. Ent22:214]
- 05F: 31 May 2008 [Hartslock NR, Oxfordshire Chilterns. Hem1:20]
- 06A: 2 June 2018 [Therfield Heath, VC20. Adults. Hem5:211]
- 06C: 11 June 2008 [Hartslock NR, Oxfordshire Chilterns. Hem1:20]
- 07D: 19 July 1992 [Brassey NR, Gloucestershire. GloucsHets] 19 July 1992 [Eyford Warren, Gloucestershire. Adults and nymphs. GloucsHets]
- 08A: 4 August 2005 [Arreton Down, VC10. HN6:14]
- 08E: 22 August 2008 [Hartslock NR, Oxfordshire Chilterns. Hem1:20]
- 09A: 1 September 2005 [Littleton Down, VC10. Adults and nymphs. HN7:16] 4 September 1971 [Portsdown, VC11. Hem3:103]
- 09B: 8 September 1962 [White Down, Box Hill, Surrey. Adults and nymphs. PTSLENHS1962:101-102]
- 09D: 18 September 1908 [Dartford, Kent. LondonHets]
- 09F: 27 September 1908 [Chipstead, Surrey. LondonHets]
- 11E: 21 November [Worth, Swanage, Dorset. EMM138:148]
- 11F: 27 November 1907 [Chipstead, Surrey. LondonHets]

## Geotomus punctulatus (A. Costa) (Cydnidae)

- 04F: 26 April 2004 [Sennen Cove/Whitesand Bay, Cornwall. CornwallHets]
- 05A: 2 May 2000 [Sennen Cove/Whitesand Bay, Carn Barges, Cornwall. CornwallHets] 5 May 1999 [Tredra Cliff, Whitesand Bay, West Cornwall. BJENH13:182]
- 06D: 19 June 1987 [Sennen Cove/Whitesand Bay, Cornwall. CornwallHets] 20 June 2001 [Sennen Cove/Whitesand Bay, Cornwall. CornwallHets]
- 06E: 24 June 2003 [Sennen Cove/Whitesand Bay, Cornwall. CornwallHets]
- 07B: 8 July 2001 [Sennen Cove/Whitesand Bay, Cornwall. CornwallHets]
- 08D: 20 August 1864 [Whitsand Bay, Land's End. EMM4:238-246]

## Legnotus limbosus (Geoffroy) (Cydnidae)

- 02A: 2 February 1934 [Heronsgate, Hertfordshire. LondonHets]
- 03C: 15 March 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:201]
- 04C: 14 April 1949 [Milton-next-Gravesend. EMM86:299-301] 13 April 2004 [Penhale Dunes, Cornwall. CornwallHets]
- 04F: 30 April 2002 [Porthcothan, Cornwall. Adult. CornwallHets]
- 05A: 1 May 2007 [38 St John Street, Oxford. Female. BJENH26:95-97] 4 May 1957 [Mucking Marsh, Stanford-le-Hope, Essex. EMM94:192] 3 May 2002 [Porthcothan, Cornwall. Adults. CornwallHets]
- 05B: 8 May 1946 [Benfleet, Essex. LondonHets] 7 May 1978 [Dagnam Park, Essex. LondonHets] 9 May 1964 [Swanscombe, Kent. LondonHets]
- 05C: 15 May 2001 [Ivydale School, Nunhead, SE15, Surrey. BJENH14:235]
- 05D: 20 May 2007 [38 St John Street, Oxford. Males and female. BJENH26:95-97] 19 May 1979 [Dagnam Park, Essex. LondonHets] 18 May 1948 [Eversholt, Bedfordshire. EMM86:6-8] 16 May 2003 [Kimnel Bay, VC50. Hem4:151] 16 May 1985 [Lower Lodge Wood NR, Gloucestershire. GloucsHets] 17 May 1952 [Sheep Leas, Horsley, Surrey. LondonHets]
- 05E: 24 May 2001 [Bodmin, Cornwall. CornwallHets] 24 May 1977 [Dagnam Park, Essex. LondonHets] 24 May 2017 [St Nicholas Fields LNR, York, VC62. Adult. Hem6:237] 22 May 1954 [Stanford-le-Hope, Essex. PTSLENHS1954-55:81]
- 05F: 31 May 1977 [Dagnam Park, Essex. LondonHets] 29 May 1900 [Headley, Surrey. LondonHets] 31 May 1897 [Hendon, Middlesex. LondonHets] 27 May 2000 [Mickleham,

- Surrey. LondonHets] 28 May 1912 [Royston, Hertfordshire. Nymph. LondonHets] 28 May 1985 [Running Water Wood, South Essex. EMM127:150] 27 May 1978 [Warsash area, VC11. Hem3:103]
- 06A: 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236] 1 June 1985 [Gulf Scrubs, Gloucestershire. GloucsHets] 2 June 2006 [Iffley Fields, Oxford. BJENH26:95-97]
- 06B: 8 June 1935 [Benfleet, Essex. LondonHets] 8 June 1907 [Darenth Wood, Kent. LondonHets] 6 June 1865 [I. O. W. (Isle of Wight). EMM69:234-245] 8 June 2006 [Loe Bar, south end, Cornwall. CornwallHets] 6 June 1993 [Moor Farm LWT Reserve, VC54. Hem3:83]
- 06C: 12 June 1948 [Hanger Wood, Stagsden, Bedfordshire. EMM86:6-8] 12 June 1903 [Horsley, Surrey. LondonHets] 11 June 1956 [Porthcothan, Cornwall. Adults and nymphs. CornwallHets] 13 June 1909 [Sherwood Forest, Nottinghamshire. Male. EMM93:49-51]
- 06D: 20 June 2019 [Between Santon Warren and Two Mile Bottom, West Norfolk. Hem6:248] 17 June 2019 [Devil's Punchbowl, near Croxton, West Norfolk. Hem6:247] 20 June 2001 [Mullion Cove village, Cornwall. CornwallHets] 17 June 2019 [Two Mile Bottom, West Norfolk. Hem6:247]
- 06E: 21 June 2019 [Near Thetford, West Norfolk. Hem6:248] 25 June 1977 [Northward Hill NNR, Kent. PTBENHS11:67-68] 21 June 2016 [Shotesham, VC27. Hem4:39]
- 07A: 5 July 1952 [Chesham Valley, Buckinghamshire. LondonHets]
- 07F: 27 July 1903 [Horsley, Surrey. LondonHets]
- 08F: 29 August 1993 [Nonsuch Park, near Cheam, Surrey. BJENH7:173]
- 09B: 7 September 1923 [Alverstone, Isle of Wight. Nymph. EMM60:117-118]
- 09C: 11 September 1942 [Chagford, Devon. Adults. EMM82:24]
- 09D: 17 September 1950 [Benfleet, Essex. LondonHets]

## Legnotus picipes (Fallén) (Cydnidae)

- 03E: 24 March 2014 [Hunstanton Dunes, VC28. HN22:4]
- 04C: 15 April 1909 [Porlock, Somerset. Male. EMM93:49-51]
- 04D: 20 April 2005 [Penhale Dunes, Cornwall. CornwallHets]
- 04F: 27 April 2005 [Penhale Dunes, Cornwall. CornwallHets]
- 05A: 5 May 1953 [Hounslow Heath, Middlesex. Ent87:15-18] 3 May 2006 [Lord's Wood Plantation, VC11. Hem3:103]
- 05B: 10 May 1939 [Purley, Surrey. LondonHets]
- 05C: 11 May 1945 [Purley, Surrey. LondonHets]
- 05D: 17 May 1939 [Purley, Surrey. LondonHets]
- 05F: 27 May 1950 [Church Woods, Blean, Kent. EMM86:224]
- 06A: 4 June 1945 [Purley, Surrey. LondonHets] 1 June 1968 [Watlington Hill, Oxfordshire. PTBENHS2:21-22]
- 06C: 12 June 1996 [Albury Heath, Surrey. EMM133:175-176]
- 06D: 18 June 2019 [Cavenham Heath, West Suffolk. Hem6:247]
- 06E: 24 June 1902 [G. W. (Glanvilles Wootton). EMM69:234-245] 21 June 2019 [Near Thetford, West Norfolk. Hem6:248] 24 June 2011 [Witley Common, Surrey. Hem6:244]
- 07D: 16 July 1866 [G. Wooton (Glanvilles Wootton). EMM69:234-245]
- 07F: 26 July 2014 [Holme Dunes, VC28. HN22:4]
- 08B: 8 August 1964 [Dungeness, Kent. PTSLENHS1964:36]
- 09F: 28 September 1895 [North Denes, Great Yarmouth. EMM31:282]
- 10A: 5 October 1952 [Hounslow Heath, Middlesex. Adults. Ent86:34-40]
- 11C: 15 November 2013 [Brancaster Dunes, VC28. HN22:4]

### Sehirus luctuosus Mulsant & Rey (Cydnidae)

- 02B: 6 February 1893 [Oxshott, Surrey. LondonHets]
- 03D: 19 March 1936 [Ryarsh, Kent. EMM82:24]
- 04A: 3 April 1943 [Bull Banks, near Duntisbourne Abbotts, Gloucestershire. Adults. EMM81:142]
- 04D: 16 April 1943 [Great Gaddesden, Hertfordshire. EMM81:163-164]
- 04E: 21 April 1925 [Near Kilkenny, Co Kilkenny. IrelandHets]

- 05A: 2 May 1997 [Aspley Guise, Bedfordshire. Adults. EMM134:52] 3 May 1867 [Bournemouth. EMM69:234-245] 1 May 2015 [East Tuddenham, VC27. Hem4:39] 4 May 2006 [Magdalen North Down, VC12. Hem3:103] 2 May 1945 [Niton, near Ventnor, Isle of Wight. Adults. EMM81:214] 3 May 1992 [White Hill, Mickleham, Surrey. BJENH7:175]
- 05B: 9 May 1998 [Bishopton Lane, VC38. Hem3:92] 8 May 1907 [Brandon, Suffolk. SuffolkHetsAnn] 10 May 1952 [Farnham, Surrey. LondonHets] 6 May 2014 [Hugglescote coal waste site, VC55. Hem3:92] 9 May 1926 [Sallins, Co Kildare. IrelandHets] 10 May 2002 [Whisby N. Park, VC53. Hem3:83]
- 05C: 12 May 1945 [Cirencester, Gloucestershire. Adults. EMM81:142] 14 May 1922 [Darenth, Kent. LondonHets] 14 May 2006 [Knaphill, Surrey. BJENH20:192]
- 05E: 25 May 1955 [Hedgerley, Buckinghamshire. LondonHets] 24 May 1953 [Hedgerley, near Slough, Buckinghamshire. Adult. EMM89:223]
- 05F: 29 May 1995 [Sharnbrook, Bedfordshire. Adult. EMM134:52] 29 May 1997 [Sundon, Bedfordshire. Adults. EMM134:52]
- 06B: 9 June 2014 [Near Croughton, Northamptonshire. Hem2:26] 7 June 1895 [Oxshott, Surrey. LondonHets] 8 June 1980 [Wilstead, Bedfordshire. Nymphs. EMM134:52]
- 06C: 12 June 1947 [Winterslow, Wiltshire. EMM88:45]
- 06D: 17 June 1923 [Forest of Dean, Gloucestershire. GloucsHets] 18 June 1945 [Hilcot, near Colesbourne, Gloucestershire. Adults. EMM81:214] 19 June 1993 [Mount Caburn NNR, Glynde, Sussex. BJENH8:88-90]
- 06E: 25 June 2015 [Padworth Recycling Centre. BJENH29:69-88]
- 06F: 30 June 1945 [Mereworth Woods, Kent. Adults and nymphs. EMM82:24] 26 June 2014 [Perham Down. BJENH29:69-88]
- 07A: 5 July 1944 [Starcross, South Devon. Ent88:89-91]
- 07D: 17 July 1952 [Hughenden Valley, High Wycombe, Buckinghamshire. Nymphs. EMM89:2] 16 July 1922 [Otford, Kent. LondonHets]
- 07E: 23 July 1945 [Streatley Hill, Berkshire. Adults and nymphs. EMM82:24]
- 07F: 28 July 1954 [Chipstead, Surrey. Adults. EMM92:47-48] 28 July 1934 [Uxbridge, Middlesex. Female. Ent71:148-153]
- 08A: 1 August 1960 [Chobham Common, Surrey. LondonHets] 4 August 1945 [Streatley Hill, Berkshire. Nymph. EMM82:24] 5 August 1934 [Worlington and Freckenham, Suffolk. EMM71:113-114]
- 08C: 15 August 1897 [Near Box Hill, Surrey. EMM34:13-15]
- 08E: 25 August 1945 [Near Greencroft Barns, Bedfordshire. EMM86:6-8]
- 08F: 26 August 1906 [Brandon, Suffolk. SuffolkHetsAnn] 29 August 1897 [Near Box Hill, Surrey. EMM34:13-15] 28 August 1934 [Uxbridge, Middlesex. Male. LondonHets]
- 09B: 7 September 1938 [Thames estuary between Rainham and Stanford-le-Hope, South Essex. Males and female. EMM79:199]
- 09C: 11 September 1942 [Chagford, Devon. Adults. EMM82:24]
- 09F: 26 September 1937 [Boxhill, Surrey. LondonHets]

## Tritomegas bicolor (Linnaeus) (Cydnidae)

- 03F: 26 March 2005 [Charlton District, South Hampshire. BJENH19:189] 31 March [Orpington. Ent18:300] 27 March 1955 [Orsett, Essex. LondonHets]
- 04A: 5 April 1999 [Bodmin, Cornwall. CornwallHets]
- 04B: 9 April 1955 [Horton Kirby, Kent. LondonHets] 8 April 1945 [Long Lane, Tingrith, Bedfordshire. *In copula*. EMM86:6-8]
- 04C: 11 April 1954 [Banstead Downs, Surrey. LondonHets] 14 April 1952 [Hackbridge, Surrey. LondonHets] 14 April 1979 [Maidenhead, Berkshire. EMM114:159] 14 April 1949 [Miltonnext-Gravesend. Adults. EMM86:299-301] 14 April 2006 [Near Grendon, VC38. HN7:13] 14 April 1949 [Northfleet. Adults. EMM86:299-301] 13 April 1935 [Staines, Middlesex. Ent71:148-153] 13 April 1979 [West Wood, Farley Mount, VC12. Hem3:103]
- 04D: 16 April 1953 [Abbey Wood, Kent. LondonHets] 19 April 1953 [Eynsford, Kent. PTSLENHS1953-54:76] 19 April 2004 [Gresford allotments, VC50. Hem6:218]

- 04E: 24 April 1935 [Albury, Surrey. EMM71:141-142] 24 April 1948 [Boxhill, Surrey. LondonHets] 22 April 1944 [Chedworth, Gloucestershire. GloucsHets] 24 April 1937 [Farningham, Kent. LondonHets] 21 April 1953 [Grounds of the Rothamsted Experimental Station, Harpenden, Hertfordshire. PTSLENHS1953-54:4] 24 April 1966 [Horton Kirby, Kent. LondonHets] 22 April 2005 [Near Ware, VC20. HN7:13] 25 April 2004 [Newmill, Cornwall. CornwallHets] 23 April 1957 [Plumstead, Kent. LondonHets]
- 04F: 29 April 1893 [Bagley Wood, near Oxford, VC22. EMM29:191-192] 30 April 1946 [Boxmoor, Hertfordshire. EMM85:249-253] 27 April 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:201] 27 April 1933 [Imperial College Biological Field Station, Slough. TSBE2:47-67] 29 April 1976 [Noak Hill, Essex. LondonHets] 27 April 1952 [Ranmore Common, Surrey. LondonHets]
- 05A: 5 May 1940 [Ashton Keynes district, Wiltshire. Ent74:174-176] 1 May 1946 [Boxmoor, Hertfordshire. EMM85:249-253] 4 May 1933 [Imperial College Biological Field Station, Slough. TSBE2:47-67] 4 May 1957 [Mucking Marsh, Stanford-le-Hope, Essex. EMM94:192] 2 May 1933 [Uxbridge, Middlesex. Ent71:148-153]
- 05B: 9 May 1954 [Bookham Common, Surrey. LondonHets] 9 May 1954 [Coulsdon, Surrey. LondonHets] 7 May 1905 [Darenth Wood, Kent. LondonHets] 10 May 1913 [Darenth, Kent. LondonHets] 9 May 1965 [Farningham Wood, Kent. PTSLENHS1965:86-87] 6 May 1980 [Grays Thurrock, Essex. LondonHets] 9 May 1953 [Hackbridge, Surrey. LondonHets] 9 May 1947 [Kew Green, Surrey. LondonHets] 10 May 1949 [Orpington, Kent. LondonHets] 8 May 2003 [Rospannel Farm, Crows-an-Wra, Cornwall. CornwallHets] 7 May 1922 [The Downs, near Mount Harry, Sussex. Adults on the wing. Ent57:47]
- 05C: 12 May 1954 [Ardington, Berkshire. EMM93:121-126] 15 May 2004 [Bentley Park Wood. Adults. HN7:11] 12 May 1979 [Dagnam Park, Essex. LondonHets] 14 May 1893 [Darenth Wood, Kent. LondonHets] 13 May 1947 [Grounds of Royal Botanic Gardens, Kew, Surrey. LondonHets] 11 May 1980 [Maidenhead, Berkshire. EMM116:132] 12 May 1924 [St Martha's, Chilworth, Surrey. PTSLENHS1934-35:12-15]
- 05D: 20 May 1944 [Andoversford, Gloucestershire. GloucsHets] 18 May 1956 [Coulsdon, Surrey. LondonHets] 16 May 1953 [Hackbridge, Surrey. LondonHets]
- 05E: 21 May 1948 [Boxhill, Surrey. LondonHets] 25 May 1963 [Farningham, Kent. PTSLENHS1963Part1:66] 25 May 1935 [Orpington, Kent. LondonHets] 22 May 1991 [Trecarrel, Cornwall. CornwallHets] 24 May 1960 [Wilmington, Kent. LondonHets] 25 May 1946 [Woodcock Wood, Fancott, Bedfordshire. EMM86:6-8]
- 05F: 26 May 1920 [Anglesey. EMM92:54-64] 29 May 1943 [Boston Manor, Middlesex. LondonHets] 27 May 1943 [Bushey, Hertfordshire. LondonHets] 31 May 1979 [Maidenhead, Berkshire. EMM114:159] 30 May 1984 [Nettleton Top, VC54. Hem3:83]
- 06A: 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236] 5 June 1884 [Shere, Surrey. LondonHets] 4 June 1951 [West End Common, Surrey. LondonHets] 3 June 1960 [Whippendell Wood, Hertfordshire. LondonHets]
- 06B: 9 June 1953 [Hackbridge, Surrey. LondonHets]
- 06C: 11 June 1949 [Grounds of Royal Botanic Gardens, Kew, Surrey. Nymphs. LondonHets] 11 June 1947 [Lampton, Middlesex. LondonHets]
- 06D: 17 June 1979 [Boswednack, Cornwall. CornwallHets] 17 June 1892 [Eynsford, Kent. LondonHets] 19 June 1948 [Gravesend, Kent. Nymphs. EMM85:39-41] 17 June 1892 [Shere, Surrey. LondonHets]
- 06E: 21-23 June 1902 [Amersham, Buckinghamshire. LondonHets] 22 June 1947 [Arnold's sandpits, Heath and Reach, Bedfordshire. Nymph. EMM86:6-8] 22 June 1912 [Burnham Beeches, Buckinghamshire. Nymph. LondonHets]
- 07A: 4 July 2014 [Linch Hill Leisure Park, Stanton Harcourt, Oxfordshire. Nymphs reared in culture. Hem2:49]
- 07B: 10 July 1948 [Clophill, Bedfordshire. Nymphs. EMM86:6-8] 7 July 2016 [Fordwich, VC15. Nymph reared in culture. BJENH30:100-101] 8 July 1983 [Porkellis Moor, Cornwall. CornwallHets] 10 July 1952 [South Downs near Willingdon, Sussex. Adults. EMM89:210-211] 07D: 17 July 1944 [Lampton, Middlesex. LondonHets]

- 07E: 24 July 1954 [Abbey Wood marshes, Kent. Nymph. LondonHets] 21 July 1951 [Hackbridge, Surrey. LondonHets]
- 07F: 28 July 1957 [Almondsbury, Gloucestershire. GloucsHets] 31 July 1946 [Fancott Gravel Pit, Bedfordshire. EMM86:6-8] 29 July 1933 [Harefield, Middlesex. Ent71:148-153] 27 July 1952 [Mickleham Downs, Surrey. LondonHets]
- 08C: 11 August 1952 [Gravesend, Kent. LondonHets]
- 08F: 27 August 1950 [Boxhill, Surrey. LondonHets] 30 August 1941 [Cheltenham, Gloucestershire. GloucsHets] 28 August 1953 [West End Common, Surrey. LondonHets]
- 09A: 2 September 1951 [Amersham, Buckinghamshire. LondonHets] 2 September 1951 [Banstead, Surrey. LondonHets]
- 09B: 8 September 1956 [Great Bookham, Surrey. Nymphs. LondonHets] 7 September 1983 [Mitcham Common, Surrey. LondonHets]
- 09C: 11 September 1942 [Chagford, Devon. Adults. EMM82:24] 14 September 1952 [Eynsford, Kent. Nymphs. PTSLENHS1952-53:86-87] 14 September 1934 [West Hyde, Hertfordshire. LondonHets]
- 09D: 17 September 1966 [Bromley, Kent. LondonHets]
- 11A: 4 November 1983 [Mitcham Common, Surrey. LondonHets]
- 11C: 15 November 1948 [Selsdon, Surrey. LondonHets]
- 11D: 17 November 1940 [River Loddon, near Swallowfield, Reading district. EMM77:101-104]

## Tritomegas sexmaculatus (Rambur) (Cydnidae)

- 06E: 24 June 2013 [Faversham, VC16. Adult. HN21:4]
- 07A: 5 July 2016 [Chartham, near Canterbury, VC15. BJENH30:100-101] 4 July 2016 [Tonford Manor, near Canterbury, VC15. BJENH30:100-101]
- 08C: 14 August 2014 [Twickenham College, Middlesex. HN22:5]
- 08E: 22 August 2012 [Bingley's Island, Canterbury, VC16. Nymphs reared in culture. HN21:4]
- 09F: 27 September 2012 [Dartford, VC16. Adult. HN21:4] 29 September 2013 [Minster Marshes, VC16. Adults. HN21:4]

### **Detailed records**

### Adomerus biguttatus (Linnaeus) (Cydnidae)

- On exposed rocks along the margins of a stream [Am Beanaidh, near Coylumbridge, Aviemore, VC96. 7 May 1985. Male and female. BJENH32:321-325]
- Sweeping woodland ground flora in old oak coppice [Hembury Woods, South Devon. 14 June 1990. BJENH4:119-121]
- Beneath stones in old oak coppice with moderately open canopy [Parsonage Wood, North Devon. 24 July 1990. BJENH4:119-121]
- Among dead leaves in gutters running along woodland rides [Pamber Forest, Hampshire. 6 August 1959. Adults. EMM96:4]
- Among clumps of common cow-wheat (*Melampyrum pratense*) growing on banks along the margins of woodland rides [Pamber Forest, Hampshire. 6 August 1959. Adults and nymphs. EMM96:4]
- In moss [Bentley Woods, Suffolk, Winter, SuffolkHets]
- On the ground on clay, sand and chalk [Britain. S&L1959]
- Chalky lanes [Dover. EMM26:81-82]
- Under dead leaves and *Peltidea canina* [Dunsford, Stoke, Devon. February and March. Saunders1892]
- In moss [Garelochhead, VC99. BJENH32:321-325]
- From moss in a wood [Guestling, March 1881, EMM17:259-260]
- In sandpits, etc [Guestling, near Hastings. Saunders1892]
- In moss at roots of *Calluna* [Hurst Green, Sussex. August. Adults and nymphs. EMM19:115-116] Gardens [Ipswich, Suffolk. SuffolkHets]
- In a roadside hedge [Mereworth Woods, Kent. EMM82:24]
- In woods [Near Battle and Guestling. EMM17:67-68]

In a sand pit [Near Hastings. May 1881. EMM18:40]

Amongst moss under heath (Calluna), etc [New Forest, Hampshire. HantsHets]

On Cow-wheat (*Melampyrum pratense*) [Oaken Wood, Surrey. June 1995. Nymphs. EMM133:79-80]

Sweeping a grassy ride [Pamber Forest. June 1940. EMM77:101-104]

Sweeping the grassy sides of a woodland ride; in moss and under leaves [Pamber Forest, Hampshire. EMM82:24]

Under stones and in sand pits [Redstone, Reigate, Surrey. LondonHets]

Woodland [Wales. HN9:5]

## Canthophorus impressus (Horváth) (Cydnidae)

At the roots of grass, beneath an accumulation of beech leaves [White Down, near Dorking, Surrey. 13 January 1952. Adults. EMM88:93]

Scurrying in short turf [Great Cheverell Hill, Salisbury Plain, Wiltshire. 26 March 2012. BJENH25:84]

Scurrying around in short turf of sheep terracing [Great Cheverell Hill SSSI, Salisbury Plain, VC8. 5 April 2012. HN19/20:11]

At roots of *Thesium humifusum* on a chalk slope [Whitedown, near Abinger, Surrey. 8 April 1961. LondonHets]

On *Thesium humifusum* [Whitedown, near Boxhill, Surrey. 8 April 1962. Adults and nymphs. LondonHets]

On downland [Durlston Country Park, Swanage, Dorset. 3 May 2008. HN11:11]

On a dead stem of marjoram in a rough place [Near Sheep Lees, Horsley, Surrey. 23 May. Ent22:214]

Strolling on the turf [Hartslock NR, Oxfordshire Chilterns. 31 May 2008. Hem1:20]

Under leaves in the rough of a golf course [Therfield Heath, VC20. 2 June 2018. Adults. Hem5:211]

Sweeping [Hartslock NR, Oxfordshire Chilterns. 11 June 2008. Hem1:20]

On *Thesium* [Eyford Warren, Gloucestershire. 19 July 1992. Adults and nymphs. GloucsHets]

On bastard toadflax [Arreton Down, VC10. 4 August 2005. HN6:14]

Crawling over low vegetation and on pathways [Littleton Down, VC10. 1 September 2005. Adults and nymphs. HN7:16]

In moss and dead leaves on a chalky hillside [Chipstead, Surrey. 27 September 1908. LondonHets]

Beneath leaves on chalk hillside [Below Banstead Wood, Chipstead, Surrey. LondonHets]

Amongst fine grass [British Isles. Butler1923]

At roots of Bastard Toadflax [Isle of Wight. September 1983. PTBENHS17:18]

Crossing the narrow open soil tracks on the down. Reared to adult in culture on marjoram taken in the vicinity of capture [Littleton Down, VC10. September 2005. Nymphs. HN22:4]

In moss under juniper on chalk downs [Near Croydon, Winter, EMM7:184-185]

From dry sites using a towed suction sampler (DragVac) [Southern England. 2012. BJENH26:217-218]

Associated with bastard toadflax (*Thesium humifusum*) on chalk downs [White Down, near Dorking, Surrey. 1951. Adults and nymphs. EMM88:93]

## Geotomus punctulatus (A. Costa) (Cydnidae)

Running on path in warm sunshine [Sennen Cove/Whitesand Bay, Carn Barges, Cornwall. 2 May 2000. CornwallHets]

In loose sand [Tredra Cliff, Whitesand Bay, West Cornwall. 5 May 1999. BJENH13:182]

Under stones, on grassy, sandy slopes near the sea [Whitsand Bay, Land's End. 20 August 1864. EMM4:238-246]

Under *Senecio viscosus* on beach [Brownsea Island, Poole Harbour, Dorset. 2006-2007. EG60:37-71]

Under stones [Cowbridge, South Wales. Saunders1892]

Under stones and *Erodium* [Sennen Cove/Whitesand Bay, Cornwall. August 1864. CornwallHets] Sand dunes [Wales. HN9:4]

On dunes [Whitesand Bay, Sennen Cove, Cornwall. May 1962. EMM98:214-215] Under *Erodium* and stones [Whitsand Bay. EMM8:110]

Legnotus limbosus (Geoffroy) (Cydnidae)

Under dead *Verbascum* leaves [Heronsgate, Hertfordshire. 2 February 1934. LondonHets]

Sweeping [Grounds of the Pest Infestation Laboratory, Slough. 15 March 1951. EMM87:201]

On/at the roots of a clump of *Lamium album* at the edge of a cinder path [Milton-next-Gravesend. 14 April 1949. EMM86:299-301]

Amongst debris on rocky ledge [Porthcothan, Cornwall. 30 April 2002. Adult. CornwallHets]

Scurrying across a brick yard [38 St John Street, Oxford. 1 May 2007. Female. BJENH26:95-97]

At the roots of black horehound (*Ballota nigra*) on open waste ground on gravelly clay soil [Mucking Marsh, Stanford-le-Hope, Essex. 4 May 1957. EMM94:192]

Amongst debris on rocky ledge [Porthcothan, Cornwall. 3 May 2002. Adults. CornwallHets]

Marshes [Swanscombe, Kent. 9 May 1964. LondonHets]

In a school playground [Ivydale School, Nunhead, SE15, Surrey. 15 May 2001. BJENH14:235]

Scurrying across a brick yard [38 St John Street, Oxford. 20 May 2007. Males and female. BJENH26:95-97]

Sweeping ground flora [Lower Lodge Wood NR, Gloucestershire. 16 May 1985. GloucsHets]

In garden [Bodmin, Cornwall. 24 May 2001. CornwallHets]

On vegetation [St Nicholas Fields LNR, York, VC62. 24 May 2017. Adult. Hem6:237]

In hedges [Hendon, Middlesex. 31 May 1897. LondonHets]

Sweeping vegetation bordering a woodland ride. Seen in flight, and settled on clothing, cars and the walls and windows of nearby buildings. Also in moss and debris beneath rideside plants [Running Water Wood, South Essex. 28 May 1985. EMM127:150]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

On wasteground [Iffley Fields, Oxford. 2 June 2006. BJENH26:95-97]

Sweeping [Darenth Wood, Kent. 8 June 1907. LondonHets]

Sweeping [Horsley, Surrey. 12 June 1903. LondonHets]

On and under stones forming a scree on a steep cliff slope with straggling growth of *Galium aparine* [Porthcothan, Cornwall. 11 June 1956. Adults and nymphs. CornwallHets]

Sweeping along a woodland ride [Between Santon Warren and Two Mile Bottom, West Norfolk. 20 June 2019. Hem6:248]

Sweeping along a track through a woodland clearing [Devil's Punchbowl, near Croxton, West Norfolk. 17 June 2019. Hem6:247]

Sweeping along a woodland ride [Two Mile Bottom, West Norfolk. 17 June 2019. Hem6:247]

Sweeping areas of sorrel and heather/heath amid a dirt-bike track, and mixed vegetation at the perimeter [Near Thetford, West Norfolk. 21 June 2019. Hem6:248]

Amongst moss and litter covering a small heap of discarded tarmacadam [Northward Hill NNR, Kent. 25 June 1977. PTBENHS11:67-68]

Sweeping Stachys [Horsley, Surrey. 27 July 1903. LondonHets]

At the roots of *Achillea* in a grassy hedge bottom, In culture, became adult 13 days later [Alverstone, Isle of Wight. 7 September 1923. Nymph. EMM60:117-118]

Beneath two inches of dry soil in an earth bank dividing two fields [Chagford, Devon. 11 September 1942. Adults. EMM82:24]

In a pitfall trap in a garden [38 St John Street, Oxford. 2011. Males and female. BJENH26:95-97]

In a pitfall trap in a garden [38 St John Street, Oxford. 2012. Males and females. BJENH26:95-97]

Under tidal debris [Brownsea Island, Poole Harbour, Dorset. 2006-2007. EG60:37-71]

On the ground [Devon. September. Adults. S&L1959]

Sweeping in lanes [Dover. EMM26:81-82]

Sweeping [Great Blakenham, Suffolk. June 1896. SuffolkHets]

Sweeping in grassy places [Grounds of Pest Infestation Laboratory, Slough. 1950. Adults. LondonHets]

Sweeping grassy areas [Grounds of Pest Infestation Laboratory, Slough. May/June 1950. EMM87:103]

At roots [Hastings. Saunders 1892]

Beneath stones [Ipswich, Suffolk. September. SuffolkHets]

Sweeping in lanes [Kent. LondonHets]

At roots [Lee, Kent. 1900. LondonHets]

At the roots of grass, on dry banks [London district. Spring and autumn. D&S1865]

In grass litter, banks of stream [Maxey, Peterborough district. May. EG20:125-135]

At plant roots on dry banks [Minehead, Somerset. August 1929. Adults and nymphs. EMM66:43-44]

At roots of *Ballota* [Mucking, near Stanford-le-Hope. LondonHets]

On and under stones of scree on a steep cliff slope. Nymphs reared on *Galium aparine* which was growing nearby, and were seen to feed on the fruits [Porthcothan, Cornwall. June 1956. Adults and nymphs. EMM92:372-374]

Under stones and in sandpits [Redstone, Reigate, Surrey. LondonHets]

Shaking moss [Reigate and Headley Lane. Saunders1892]

Among Galium verum on sand-hills [Rock, Cornwall. June 1956. Dead adult. EMM92:372-374]

On sandy bank [Shalford. Saunders 1892]

Under a reptile tile [VC40. HN22:10]

## Legnotus picipes (Fallén) (Cydnidae)

Under heath bedstraw (*Galium hercynicum*) [Hounslow Heath, Middlesex. 5 May 1953. Ent87:15-18]

Under Myosotis on a disturbed firesite [Albury Heath, Surrey. 12 June 1996. EMM133:175-176]

Sweeping short, mixed vegetation dominated by sorrel and heather/heath [Cavenham Heath, West Suffolk. 18 June 2019. Hem6:247]

Sweeping areas of sorrel and heather/heath amid a dirt-bike track, and mixed vegetation at the perimeter [Near Thetford, West Norfolk. 21 June 2019. Hem6:248]

Sweeping [Witley Common, Surrey. 24 June 2011. Hem6:244]

At the roots of violet [North Denes, Great Yarmouth. 28 September 1895. EMM31:282]

Under Galium hercynicum [Hounslow Heath, Middlesex. 5 October 1952. Adults. Ent86:34-40]

In an old pit by roadside [Between Luton and Harpenden, Bedfordshire. 1921. EMM86:6-8]

From *Galium saxatile* and *G. verum*. Open habitats, sandy substrates, vegetated coastal shingle, inland heaths, breckland [Britain. HSGN9:8]

Searching at the base of bedstraws in dry, sandy places [Britain. S&L1959]

On a heath [Chobham. 1876. EMM13:113-114]

On sandhills [Coast north of Deal, East Kent. September 2004. HN4:4]

Searching at the roots of violets on the sandhills [North Denes, Great Yarmouth. July 1905. PSLENHS1905-06:85]

On Galium [Spurn Head, East Yorkshire. July 1953. EMM90:40]

Sandhills [Yarmouth. Saunders1892]

## Sehirus luctuosus Mulsant & Rey (Cydnidae)

Dug out from under a yew tree, six to nine inches beneath the surface [Ryarsh, Kent. 19 March 1936. EMM82:24]

Among small loose stones on a steep dry slope with sparse vegetation mostly of *Glechoma hederacea* and *Myosotis arvensis*. Difficult to catch as they readily buried themselves among the loose pebbles [Bull Banks, near Duntisbourne Abbotts, Gloucestershire. 3 April 1943. Adults. EMM81:142]

Quarries [Near Kilkenny, Co Kilkenny. 21 April 1925. IrelandHets]

On close-cropped turf [Aspley Guise, Bedfordshire. 2 May 1997. Adults. EMM134:52]

Amongst *Myosotis arvensis*, and under the stones amongst which it grew, on an undercliff [Niton, near Ventnor, Isle of Wight. 2 May 1945. Adults. EMM81:214]

On ground under forget-me-not [White Hill, Mickleham, Surrey. 3 May 1992. BJENH7:175]

At roots of Senecio jacobeae in sand [Brandon, Suffolk. 8 May 1907. SuffolkHetsAnn]

Running in a quarry on esker ground [Sallins, Co Kildare. 9 May 1926. IrelandHets]

In and around clumps of forget-me-not (*Myosotis*) in a garden. Two forms, with white or smoky membranes [Cirencester, Gloucestershire. 12 May 1945. Adults. EMM81:142]

Garden [Knaphill, Surrey. 14 May 2006. BJENH20:192]

On the ground in a disused clay-pit where *Myosotis hispida* was growing [Hedgerley, near Slough, Buckinghamshire. 24 May 1953. Adult. EMM89:223]

On a railway embankment [Sharnbrook, Bedfordshire. 29 May 1995. Adult. EMM134:52]

On mossy rubble in a chalk quarry [Sundon, Bedfordshire. 29 May 1997. Adults. EMM134:52]

Searching at base of forget-me-not (*Myosotis*) along the perimeter of a filled-in quarry [Near Croughton, Northamptonshire. 9 June 2014. Hem2:26]

In a fallow field [Wilstead, Bedfordshire. 8 June 1980. Nymphs. EMM134:52]

Crawling up stems of *Myosotis arvensis*, and probing the closed calyces, in a partly-felled wood. [Hilcot, near Colesbourne, Gloucestershire. 18 June 1945. Adults. EMM81:214]

On forget-me-not [Mount Caburn NNR, Glynde, Sussex. 19 June 1993. BJENH8:88-90]

Sweeping a brownfield site [Padworth Recycling Centre. 25 June 2015. BJENH29:69-88]

At base of forget-me-not growing in a woodland clearing. When disturbed they scattered and hid beneath stones and leaves or burrowed into the soil [Mereworth Woods, Kent. 30 June 1945. Adults and nymphs. EMM82:24]

Finger-tip searching in short herbage on a brownfield site [Perham Down. 26 June 2014. BJENH29:69-88]

In an old Brassica seedbed overgrown with weeds [Starcross, South Devon. 5 July 1944. Ent88:89-91]

Under *Myosotis* in a lane cleared through woodland [Hughenden Valley, High Wycombe, Buckinghamshire. 17 July 1952. Nymphs. EMM89:2]

Under *Myosotis arvensis* [Streatley Hill, Berkshire. 23 July 1945. Adults and nymphs. EMM82:24] From a dry, stony, derelict, arable field thinly overgrown by a calcicole flora. Associated with

*Myosotis* and roaming on the ground [Chipstead, Surrey. 28 July 1954. Adults. EMM92:47-48] At roots of grass on a railway bank [Uxbridge, Middlesex. 28 July 1934. Female. Ent71:148-153]

From a sandy spot [Worlington and Freckenham, Suffolk. 5 August 1934. EMM71:113-114]

When pulling up a *Verbascum* plant [Near Box Hill, Surrey. 15 August 1897. EMM34:13-15]

Under moss on slope in small open wood [Near Greencroft Barns, Bedfordshire. 25 August 1945. EMM86:6-8]

At roots of Senecio jacobeae in sand [Brandon, Suffolk. 26 August 1906. SuffolkHetsAnn]

At the roots of a tall plant [Near Box Hill, Surrey. 29 August 1897. EMM34:13-15]

At roots of grass on railway bank [Uxbridge, Middlesex. 28 August 1934. Male. LondonHets]

Under *Matricaria/Polygonium*. Seen burying itself in sand [Thames estuary between Rainham and Stanford-le-Hope, South Essex. 7 September 1938. Males and female. EMM79:199]

Beneath two inches of dry soil in an earth bank dividing two fields [Chagford, Devon. 11 September 1942. Adults. EMM82:24]

In a pitfall trap in a garden [38 St John Street, Oxford. 2012. BJENH26:95-97]

Sandy, sparsely vegetated areas [Bedfordshire. BJENH18:208]

Under a stone on chalky ground and at the roots of *Hypericum perforatum* [Box Hill. Butler1923] Heard to emit a song in culture [Box Hill, Surrey OR Rothamsted, Hertfordshire. April 1953.

EMM90:49-56]

On a sparsely vegetated bank at the side of an abandoned quarry [Co Carlow. 2015. HN23:13]

By gentle excavation around the shrivelled remains of forget-me-not plants growing in bare gravelly soil [Co Carlow. 2015. HN23:13]

In a derelict field [Colesborne, Cheltenham. Butler1923]

On the coast [Dorset. Ent47:146-147]

Under Nepeta glechoma on chalk soil at the coast [Dorset. Butler1923]

In a hypogean pitfall trap under an arable field margin [Jealott's Hill, near Bracknell, Berkshire. 2014. BJENH29:211-229]

Under a stone [Near Box Hill, Surrey. August 1897. EMM34:13-15]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. May 2005. HN5:7]

In an old, shallow gravel pit [Near Standlake, Oxfordshire. HSGN13:8]

On forget-me-nots on disturbed ground [Risby Warren, Lincolnshire. BJENH1:43]

Under plant debris in a chalk pit [Sandown, Isle of Wight. August 1926. Nymph reared in culture. EMM63:41-42]

In a gravel pit [St George's Down, near Newport, Isle of Wight. August 1907. Nymphs. EMM43:253-254]

Under *Peltidea* [Stoke Wood, near Exeter. Saunders1892]

Tritomegas bicolor (Linnaeus) (Cydnidae)

Amongst Ivy, etc [Orpington. 31 March. Ent18:300]

On deadnettle, *etc* [Long Lane, Tingrith, Bedfordshire. 8 April 1945. *In copula*. EMM86:6-8] In a garden [Maidenhead, Berkshire. 14 April 1979. EMM114:159]

On a clump of *Lamium album* at the edge of a cinder path. In culture, seen to feed on *L. album*. Eggs were laid in the soil, under a stone and under dead leaves. Females were seen to brood over the eggs [Milton-next-Gravesend. 14 April 1949. Adults. EMM86:299-301]

On a pavement at the base of a hedge [Near Grendon, VC38. 14 April 2006. HN7:13]

On a clump of *Lamium album* at the edge of a footpath [Northfleet. 14 April 1949. Adults. EMM86:299-301]

Sunning on nettles by a roadside [Eynsford, Kent. 19 April 1953. PTSLENHS1953-54:76]

Sweeping cow-parsley [Albury, Surrey. 24 April 1935. EMM71:141-142]

On a footpath surfaced with loose limestone chips colonised by sparse tiny rosettes of Red Deadnettle (*Lamium purpureum*) and other ruderal weeds [Near Ware, VC20. 22 April 2005. HN7:13]

On dead nettles [Bagley Wood, near Oxford, VC22. 29 April 1893. EMM29:191-192]

In a small orchard, on *Lamium album* and nettles, and one on apple blossom [Boxmoor, Hertfordshire. 30 April 1946. EMM85:249-253]

On young nettles [Grounds of the Pest Infestation Laboratory, Slough. 27 April 1951. EMM87:201]

Under black horehound (*Ballota nigra*) on open waste ground on gravelly clay soil [Mucking Marsh, Stanford-le-Hope, Essex. 4 May 1957. EMM94:192]

Flying around garden [Coulsdon, Surrey. 9 May 1954. LondonHets]

On white nettles [Darenth, Kent. 10 May 1913. LondonHets]

On path [Kew Green, Surrey. 9 May 1947. LondonHets]

In a suction trap in a field of young winter wheat [Ardington, Berkshire. 12 May 1954. EMM93:121-126]

Swarming around two small figwort species in a recently cleared conifer area [Bentley Park Wood. 15 May 2004. Adults. HN7:11]

In a patch of rough ground in a garden [Maidenhead, Berkshire. 11 May 1980. EMM116:132]

On grass beneath a hedge [St Martha's, Chilworth, Surrey. 12 May 1924. PTSLENHS1934-35:12-15]

In greenhouse of garden [Coulsdon, Surrey. 18 May 1956. LondonHets]

On Stachys and Lamium [Woodcock Wood, Fancott, Bedfordshire. 25 May 1946. EMM86:6-8]

In a garden [Maidenhead, Berkshire. 31 May 1979. EMM114:159]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

Sweeping hedgebank [Shere, Surrey. 5 June 1884. LondonHets]

On *Lamium album* in a garden, clustered on the whorls of calyces containing young fruits. In culture, seen feeding inside and outside calyces [Gravesend, Kent. 19 June 1948. Nymphs. EMM85:39-41]

From Black horehound (*Ballota nigra*) [Linch Hill Leisure Park, Stanton Harcourt, Oxfordshire. 4 July 2014. Nymphs reared in culture. Hem2:49]

On Lamium album [Clophill, Bedfordshire. 10 July 1948. Nymphs. EMM86:6-8]

On Ballota nigra [Fordwich, VC15. 7 July 2016. Nymph reared in culture. BJENH30:100-101]

From *Lamium album* in an old chalk pit. In culture, eggs were laid in soil with the adult guarding them. The first instar nymphs were seen crawling over the soil surface. The younger nymphs congregate in the calyx of *Lamium*, feeding particularly on the nutlets. The older nymphs are

too big for this and are found feeding on the younger parts of the plant, particularly under the calyx [South Downs near Willingdon, Sussex. 10 July 1952. Adults. EMM89:210-211]

On bare gravel [Fancott Gravel Pit, Bedfordshire. 31 July 1946. EMM86:6-8]

On Lamium album [Gravesend, Kent. 11 August 1952. LondonHets]

Beneath two inches of dry soil in an earth bank dividing two fields [Chagford, Devon. 11 September 1942. Adults. EMM82:24]

In ant hill [Mitcham Common, Surrey. 4 November 1983. LondonHets]

In flood debris [River Loddon, near Swallowfield, Reading district. 17 November 1940. EMM77:101-104]

On White Dead-nettles [Along the Ashby Canal, Leicestershire. HN7:13]

In a suction trap [Ardington. TRESL112:173-220]

Heard to emit a song in culture [Box Hill, Surrey OR Rothamsted, Hertfordshire. April 1953. EMM90:49-56]

Under bark of trees [Bury district, Suffolk. SuffolkHets]

In ants' nests [Bury district, Suffolk. Nymphs. SuffolkHets]

On dead-nettle (Lamium) [Carshalton, Surrey. LondonHets]

Sweeping [Chobham. Saunders1892]

Lanes [Dover. EMM26:81-82]

On Stachys sylvestris [Elvaston, Derby. July 1932. EMM68:213-214]

On Stachys sylvatica [Fleet, Hampshire. Nymphs. HantsHets]

On the ground [Gravesend, Kent. May 1943. LondonHets]

At the roots of *Alliaria petiolata* and among *Stellaria media* [Grounds of Pest Infestation Laboratory, Slough. June 1950. Nymphs. EMM87:103]

In a *Deschampsia* tuft [Grounds of the Pest Infestation Laboratory, Slough. December 1950. Adult. EMM87:201]

On Lamium album [Hounslow Heath, Middlesex. Ent87:15-18]

On *Alliaria officinalis*, *Lychnis dioica*, *Heracleum sphondylium*, *Rubus fructicosus* and *Rumex*. In culture, survived for several weeks on each of these plants [Imperial College Biological Field Station, Slough. 1933. TSBE2:47-67]

Sweeping nettles [Lee, Kent. LondonHets]

On Ballota nigra, Lamium album and Lamium purpureum [Middlesex. Ent71:148-153]

At roots of *Ballota* [Mucking, near Stanford-le-Hope. LondonHets]

On potatoes [Nottingham. May 1932. EMM68:213-214]

On nettles [Peterborough district. EG20:125-135]

With white deadnettle [Phillack & Mexico Towans, Cornwall. 1998-2005. CornwallHets]

On nettles [Reading district. 1940. EMM77:101-104]

Beating, sweeping and under stones [Redstone, Reigate, Surrey. LondonHets]

At light [Rothamsted Experimental Station, Harpenden. 1934. Female. PRESL(A)13:19-24]

In a light trap [Rothamsted Experimental Station, Harpenden. TRESL112:173-220]

In sandy places, among grass and herbage [Round London. Spring. D&S1865]

In ivy [Shalford and Gomshall. Saunders1892]

Seen feeding on the young seed heads of *Ballota nigra*, inserting the rostrum at the base of the calyx [Slough, Buckinghamshire. Summer 1946. Adults and nymphs. EMM85:193-206]

On and beneath black horehound (*Ballota nigra*) [Slough, Buckinghamshire. Summer 1946. EMM85:193-206]

By a canal [Southall, Middlesex. ERJV1:114-116]

Under *Artemisia* [St Albans. Saunders1892]

Sweeping [Suffolk. SuffolkHets]

Sweeping herbage of a hedgerow [Tuddenham and Barton Mills, Suffolk. April 1935. Female. EMM71:141-142]

Indoors [Warwickshire. 2000. HN7:11]

In a garden [Warwickshire. HN7:11]

From nettles [Wymondley, Hertfordshire. August 1880. EMM17:234-235]

Tritomegas sexmaculatus (Rambur) (Cydnidae)

Associated with Black Horehound (*Ballota nigra*) [Faversham, VC16. 24 June 2013. Adult. HN21:4]

On Ballota nigra [Chartham, near Canterbury, VC15. 5 July 2016. BJENH30:100-101]

On Ballota nigra [Tonford Manor, near Canterbury, VC15. 4 July 2016. BJENH30:100-101]

Associated with Black Horehound (*Ballota nigra*) [Bingley's Island, Canterbury, VC16. 22 August 2012. Nymphs reared in culture. HN21:4]

Associated with Black Horehound (*Ballota nigra*) [Dartford, VC16. 27 September 2012. Adult. HN21:4]

Associated with Black Horehound (*Ballota nigra*) [Minster Marshes, VC16. 29 September 2013. Adults. HN21:4]

On White Dead-nettle [Darland Banks, Kent. 2015. Nymphs. HN23:9]

On Black Horehound [Near Benenden, VC15. 2011. Nymph. HN17/18:4]

On black horehound (*Ballota nigra*) [Tyland Barn, Maidstone, Kent. August 2011. Nymph reared in culture. BJENH25:174]

Associated with large stands of Black Horehound (*Ballota nigra*) [Tyland Barn, Maidstone, VC15. 2011. Adults and nymphs. HN17/18:4]

Associated with Black Horehound (Ballota nigra) [Westbere, VC16. 2013. HN21:4]

## **Bibliography**

## Adomerus biguttatus (Linnaeus) (Cydnidae)

- as *Adomerus biguttatus* BJENH25:205-215, BJENH32:321-325, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem2:30, Hem3:1, Hem3:129, Hem3:39, Hem4:1, Hem4:101, Hem4:130, Hem4:26, Hem4:67, Hem5:1, Hem5:101, Hem5:119, Hem5:159, Hem5:191, Hem5:25, Hem5:39, Hem5:53, Hem5:92, Hem6:8
- as S. biguttatus EMM81:253-273, EMM82:94-95
- as Seh. biguttatus EMM91:7-27
- as Sehirus 2-guttatus EMM17:259-260, EMM18:140
- as Sehirus bigguttatus TSBE11:245-280
- as Sehirus biguttatus BJENH19:127, BJENH25:205-215, BJENH4:119-121, BJENH4:43, Butler1923, CornwallHets, D&S1865, EMM133:79-80, EMM17:67-68, EMM18:40, EMM19:115-116, EMM26:81-82, EMM3:118, EMM62:93, EMM69:234-245, EMM77:101-104, EMM81:142, EMM82:24, EMM86:224, EMM90:250, EMM96:4, ERJV81:160-163, GloucsHets, HantsHets, HN9:5, HN9:6, HSGN10:3, HSGN12:8, HSGN7:3, HSGN8:8, LondonHets, PTSLENHS1962:123-183, S&L1959, Saunders1892, SuffolkHets, Synopsis1875, TSBE1:51-84
- as Sehirus bipunctatus EMM16:175

## Byrsinus flavicornis (Fabricius) (Cydnidae)

- as A. flavicornis EMM81:253-273
- as Aeth. flavicornis EMM91:7-27
- as Aethus flavicollis HSGN1:4
- as Aethus flavicornis BJENH25:205-215, EMM35:155-156, PTSLENHS1956:111-136, S&L1959
- as *Byrsinus flavicornis* BJENH25:205-215, BJENH32:321-325, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem3:1, Hem3:39, Hem4:1, Hem5:1, Hem5:101, Hem6:8
- as Cydnus flavicornis Butler1923, EMM43:196-202, EMM44:22-29, HantsHets

## Canthophorus impressus (Horváth) (Cydnidae)

- as Canthophorus dubius EMM138:148
- as *Canthophorus impressus* BJENH25:205-215, BJENH25:84, BJENH26:217-218, EMM138:148, Hem1:20, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:30, Hem3:1, Hem3:103, Hem3:39, Hem4:1, Hem4:130, Hem4:67, Hem5:1, Hem5:101, Hem5:148, Hem5:191, Hem5:211, Hem5:39, Hem5:53, Hem5:69, Hem6:220, Hem6:8, HN11:11, HN11:14, HN19/20:11, HN21:4, HN22:4, HN23:8, HN6:14, HN7:13, HN7:16, HN9:2

- as S. dubius EMM81:253-273, EMM82:94-95
- as Seh. dubius EMM91:7-27
- as Sehirus dubius APSLENHS1888-89:149, BJENH11:110, BJENH25:205-215, BJENH25:84, Butler1923, D&S1865, EMM138:148, EMM34:218-219, EMM6:232, EMM69:234-245, EMM7:184-185, EMM8:289-290, EMM81:142, EMM82:24, EMM88:93, EMM89:212, Ent22:214, GloucsHets, HantsHets, HSGN1:5, HSGN8:8, LondonHets, PTBENHS17:18, PTSLENHS1962:101-102, PTSLENHS1962:123-183, PTSLENHS1965:83, S&L1959, Saunders1892, Synopsis1875, TSBE11:245-280, TSBE16:1-48
  as Sehirus impressus HN2:6

Geotomus petiti Wagner (Cydnidae)

as Geotomus petiti BJENH32:321-325

Geotomus punctulatus (A. Costa) (Cydnidae)

- as Aethus laevis EMM11:232-235, EMM4:238-246, EMM8:110
- as G. punctulatus EMM81:253-273
- as Geo. punctulatus EMM91:7-27
- as *Geotomus punctulatus* BJENH13:182, BJENH2:53-54, Butler1923, CornwallHets, EG60:37-71, EMM11:232-235, EMM33:213-214, EMM35:155-156, EMM43:196-202, EMM69:234-245, EMM89:17, EMM89:212, EMM98:214-215, ERJV86:164-165, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem3:1, Hem4:1, Hem4:67, Hem5:1, Hem5:101, Hem5:148, Hem5:191, Hem6:9, HN16:3, HN23:8, HN4:9, HN6:13, HN9:4, HN9:6, HN9:7, HSGN1:4, HSGN8:8, PTBENHS4:17, PTSLENHS1956:111-136, S&L1959, Saunders1892, Synopsis1875, TSBE1:51-84

## Legnotus limbosus (Geoffroy) (Cydnidae)

- as *Gnathoconus albomarginatus* Butler1923, EMM39:17-18, EMM39:69-70, EMM51:220, EMM60:117-118, EMM66:43-44, Ent36:270, Ent47:146-147, HantsHets, PRESL(A)15:2-12, PSLENHS1903:53, Saunders1892, SuffolkHets, TSBE1:51-84
- as *L. limbosus* EMM81:253-273
- as Leg. limbosus EMM91:7-27
- as Legnotus limbatus HSGN1:13
- as *Legnotus limbosus* BJENH14:235, BJENH18:233-252, BJENH26:95-97, BJENH28:119, BJENH32:321-325, BJENH7:173, CornwallHets, EG20:125-135, EG60:37-71, EMM127:150, EMM149:136-137, EMM79:256, EMM82:24, EMM86:299-301, EMM86:6-8, EMM87:103, EMM87:201, EMM87:236, EMM92:372-374, EMM93:49-51, EMM94:192, Ent87:25-30, ERJV111:27-35, GloucsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem2:21, Hem2:30, Hem3:1, Hem3:100, Hem3:103, Hem3:39, Hem3:74, Hem3:83, Hem4:101, Hem4:130, Hem4:147, Hem4:151, Hem4:2, Hem4:26, Hem4:39, Hem4:85, Hem5:1, Hem5:101, Hem5:119, Hem5:148, Hem5:191, Hem5:25, Hem5:39, Hem5:53, Hem5:69, Hem5:92, Hem6:237, Hem6:238, Hem6:247, Hem6:248, Hem6:276, Hem6:9, HN22:10, HSGN9:8, LondonHets, PTBENHS11:67-68, PTSLENHS1950-51:80-81, PTSLENHS1952-53:76-77, PTSLENHS1954-55:81, PTSLENHS1962:123-183, S&L1959, TSBE11:245-280 as *Sehirus albomarginatus* D&S1865, EMM12:154, EMM2:270-272, EMM26:81-82, EMM6:183, EMM6:241-249, EMM69:234-245, Ent27:222, ERJV15:134, Synopsis1875

## Legnotus picipes (Fallén) (Cydnidae)

- as *Gnathoconus picipes* Butler1923, EMM13:113-114, EMM31:282, EMM34:13-15, EMM60:39, Ent38:261, Ent58:18, ERJV21:272-276, HantsHets, PSLENHS1903:51, PSLENHS1905-06:85, Saunders1892
- as Gnathosomus picipes Ent36:222
- as *L. picipes* EMM81:253-273
- as Leg. picipes EMM91:7-27
- as *Legnotus picipes* BJENH32:321-325, CornwallHets, EMM133:175-176, EMM86:224, EMM86:6-8, EMM90:40, EMM92:372-374, EMM93:49-51, Ent86:34-40, Ent87:15-18,

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as Sehirus picipes EMM12:154, EMM69:234-245, Ent10:9-15, Synopsis1875

## Sehirus luctuosus Mulsant & Rey (Cydnidae)

- as S. luctuosus EMM81:253-273, EMM82:94-95
- as Seh. luctuosus EMM91:7-27
- as *Sehirus luctuosus* BJENH1:43, BJENH16:187, BJENH18:208, BJENH20:192, BJENH26:95-97, BJENH29:211-229, BJENH29:69-88, BJENH32:321-325, BJENH7:175, BJENH8:88-90, Butler1923, EMM134:52, EMM149:136-137, EMM44:113, EMM63:41-42, EMM71:113-114, EMM79:199, EMM81:142, EMM81:163-164, EMM81:214, EMM82:24, EMM82:42, EMM85:39-41, EMM86:6-8, EMM88:45, EMM89:2, EMM89:212, EMM89:223, EMM90:49-56, EMM92:47-48, Ent47:146-147, Ent57:90, Ent71:148-153, Ent87:25-30, Ent88:89-91, ERJV125:70-72, GloucsHets, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:26, Hem2:30, Hem3:1, Hem3:103, Hem3:129, Hem3:22, Hem3:23, Hem3:39, Hem3:74, Hem3:83, Hem3:92, Hem4:101, Hem4:127, Hem4:130, Hem4:2, Hem4:26, Hem4:39, Hem4:68, Hem4:85, Hem5:1, Hem5:101, Hem5:119, Hem5:148, Hem5:16, Hem5:191, Hem5:25, Hem5:39, Hem5:53, Hem5:69, Hem5:92, Hem6:10, Hem6:283, HN17/18:26, HN23:13, HN5:7, HN6:2, HN7:11, HN9:7, HSGN13:8, HSGN7:4, HSGN8:8, IrelandHets, LondonHets, PTSLENHS1944-45:9, PTSLENHS1962:123-183, S&L1959, TSBE11:245-280
- as *Sehirus morio* D&S1865, EMM34:13-15, EMM39:17-18, EMM43:253-254, EMM44:113, EMM44:32-34, EMM69:234-245, Ent24:261-263, HantsHets, Saunders1892, SuffolkHetsAnn, Synopsis1875

## Tritomegas bicolor (Linnaeus) (Cydnidae)

- as S. bicolor EMM81:253-273, EMM82:94-95
- as Seh. bicolor EMM91:7-27
- as Sehirus bicolor BJENH19:189, BJENH25:205-215, Butler1923, CornwallHets, D&S1865, EG20:125-135, EG60:37-71, EMM114:159, EMM116:132, EMM133:261-262, EMM17:234-235, EMM2:270-272, EMM26:81-82, EMM29:191-192, EMM39:17-18, EMM60:156, EMM61:253-257, EMM68:213-214, EMM68:231-232, EMM69:234-245, EMM71:141-142, EMM77:101-104, EMM81:142, EMM82:24, EMM82:66, EMM85:193-206, EMM85:249-253, EMM85:39-41, EMM86:299-301, EMM86:309-310, EMM86:6-8, EMM87:103, EMM87:201, EMM87:236, EMM89:210-211, EMM89:212, EMM89:216, EMM90:291-292, EMM90:49-56, EMM92:54-64, EMM93:121-126, EMM94:192, Ent18:300, Ent27:222, Ent57:47, Ent59:84-85, Ent60:283-284, Ent71:148-153, Ent74:174-176, Ent87:15-18, Ent87:25-30, ERJV1:114-116, ERJV15:134, ERJV34:207, GloucsHets, HantsHets, HN7:13, HN9:3, HSGN1:12, HSGN13:11, HSGN5:4, HSGN7:2, JSBE5:179-186, JSBE5:75-78, LondonHets, PRESL(A)13:19-24, PRESL(A)15:2-12, PSLENHS1903:3-6, PSLENHS1922-23:115, PTSLENHS1934-35:12-15, PTSLENHS1950-51:77-78, PTSLENHS1952-53:74, PTSLENHS1952-53:77, PTSLENHS1952-53:86-87, PTSLENHS1953-54:4, PTSLENHS1953-54:76, PTSLENHS1962:123-183, PTSLENHS1963Part1:66, PTSLENHS1965:86-87, S&L1959, Saunders 1892, Suffolk Hets, Synopsis 1875, TRESL 112:173-220, TSBE 1:51-84, TSBE 11:245-280, TSBE2:47-67, TSBE6:115-136
- as *Tritomegas bicolor* BJENH25:205-215, BJENH30:100-101, BJENH32:321-325, EG64:146-165, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem2:30, Hem2:49, Hem3:1, Hem3:103, Hem3:129, Hem3:39, Hem3:74, Hem3:83, Hem4:101, Hem4:130, Hem4:2, Hem4:26, Hem4:68, Hem4:85, Hem5:1, Hem5:101, Hem5:119, Hem5:138, Hem5:148, Hem5:191, Hem5:25, Hem5:39, Hem5:53, Hem5:69, Hem5:80, Hem5:85, Hem5:92, Hem6:10, Hem6:218, Hem6:237, Hem6:238, HN16:7, HN17/18:26, HN17/18:4, HN23:8, HN23:9, HN7:11

Tritomegas sexmaculatus (Rambur) (Cydnidae)

as *Tritomegas sexmaculatus* BJENH25:174, BJENH25:205-215, BJENH30:100-101, BJENH32:321-325, EG64:146-165, Hem1:3, Hem1:40, Hem1:41, Hem3:1, Hem3:100, Hem4:130, Hem4:68, Hem5:1, Hem5:101, Hem5:148, Hem5:191, Hem5:80, Hem5:85, Hem5:90, Hem6:10, HN16:7, HN17/18:17, HN17/18:4, HN21:4, HN22:5, HN23:8, HN23:9

#### **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vicecounty Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above. Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

## Adomerus biguttatus (Linnaeus) (Cydnidae)

Common name. The Cow-wheat Shieldbug.

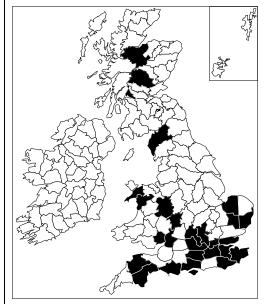
First report. D&S1865 as Sehirus biguttatus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported mostly from woods (n), amongst cowwheat (n), Peltidea canina (w), sweeping ground flora, under stones, amongst leaf litter and in moss (n, w). Also reported from gardens, roadside hedges, chalky lanes, sandpits, and on rocks along the margins of a stream.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April			2		1	
May		2				1
June			1			
July					2	
August		2 N				
September						1 N
October			1			
November						
December						

No habitus images are available.

# Byrsinus flavicornis (Fabricius) (Cydnidae) Common name. The Freshwater Shieldbug. First report. EMM35:155-156 as Aethus flavicornis. Ambiguities. None reported. Geographical distribution. See vice-county map opposite. Seasonal distribution. See heximonth calendar opposite. Other details. None reported. 6-10 11-15 16-20 21-25 January February March April May June July August September October November December No habitus images are available.

## Canthophorus impressus (Horváth) (Cydnidae)

Common name. The Down Shieldbug.

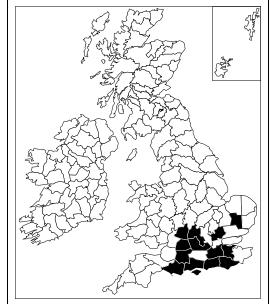
First report. D&S1865 as Sehirus dubius.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported mostly from downs (n, w), found under leaf litter (w), in moss, amongst grass, in short turf (w) and with bastard toadflax (n). There is a record on a dead stem of marjoram. Nymphs have been reared in culture on marjoram.



	1-5	6-10	11-15	16-20	21-25	26-
January			1			
February						
March						1
April	1	2 N	1			
May	2			2	1	1
June	1		1			
July				2 N		
August	1				1	
September	2 N	1 N		1		1
October						
November					1	1
December						

No habitus images are available.

# Geotomus petiti Wagner (Cydnidae) Common name. The Deal Dune Shieldbug. First report. BJENH32:321-325 as Geotomus petiti. Ambiguities. None reported. Geographical distribution. See vice-county map opposite. Seasonal distribution. See heximonth calendar opposite. Other details. None reported. 6-10 11-15 16-20 21-25 January February March April May June July August September October November December No habitus images are available.

# Geotomus punctulatus (A. Costa) (Cydnidae)

Common name. The Cornish Dune Shieldbug.

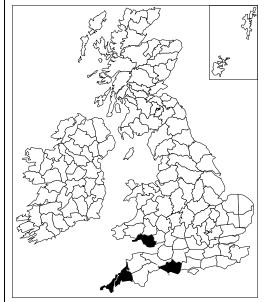
First report. EMM4:238-246 as Aethus laevis.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported on dunes and at the coast; from under stones, in loose sand, under Senecio viscosus, and under Erodium.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						1
May	2					
June				2	1	
July		1				
August				1		
September						
October						
November						
December						

No habitus images are available.

## Legnotus limbosus (Geoffroy) (Cydnidae)

Common name. The Common Bedstraw Shieldbug.

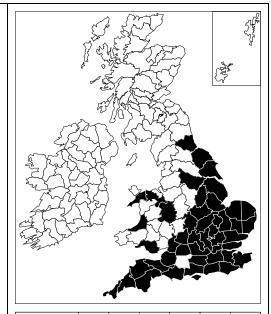
First report. D&S1865 as Sehirus albomarginatus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported sweeping (w), at the roots of plants (n), amongst debris and leaf litter (w), in moss, and under stones (n); in woods, at the coast, in sandpits, on waste ground and grassy places, in lanes and hedges (n) and in urban gardens. It has been taken in pitfall traps and has been found buried in soil. Specific plant associations include Lamium album, Stachys, Achillea (n), Verbascum (w), Galium and Ballota. In culture, nymphs have been reared on Galium aparine taken from the area of capture, and were seen to feed on the fruits.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February	1					
March			1			
April			2			1
May	3	3	1	6	4	6 N
June	3	5	4 N	4	3	
July	1					1
August						1
September		N	1	1		
October						
November						
December						



# Legnotus picipes (Fallén) (Cydnidae)

Common name. The Scarce Bedstraw Shieldbug.

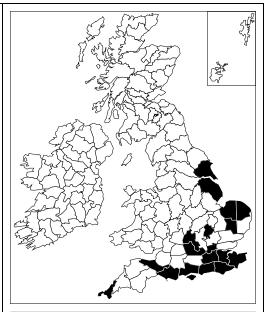
First report. EMM12:154 as Sehirus picipes.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported sweeping, on, under and at the roots of plants; on heaths, sandhills and disturbed ground. Specific plant associations include bedstraws, violet and forget-me-not.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March					1	
April			1	1		1
May	2	1	1	1		1
June	2		1	1	3	
July				1		1
August		1				
September						1
October	1					
November			1			
December						



## Sehirus luctuosus Mulsant & Rey (Cydnidae)

Common name. The Forget-me-not Shieldbug.

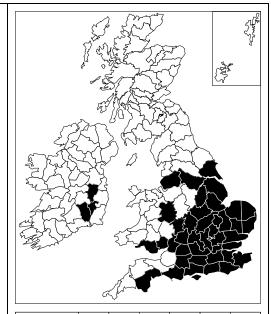
First report. D&S1865 as Sehirus morio.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported sweeping, on and at the roots (n) of plants, among and under stones, beneath leaves (n) and buried in soil (w); in woods (n), on derelict land, on railway banks, in gardens, at the coast, and in quarries (n). It has been taken in pitfall traps. Specific plant associations include forget-me-nots (n), Senecio jacobeae, Verbascum, Nepeta glechoma and Peltidea. It has been seen feeding on the calyces of Myosotis arvensis.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February		1				
March				1		
April	1			1	1	
May	6	6	3		2	2
June		2 N	1	3	1	2 N
July	1			1 N	1 N	2
August	2 N		1		1	3
September		1	1			1
October						
November						
December						



## Tritomegas bicolor (Linnaeus) (Cydnidae)

Common name. The Common Pied Shieldbug.

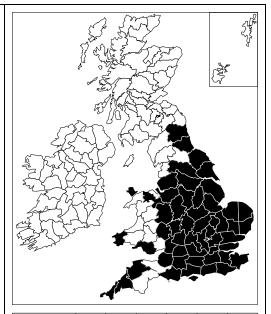
First report. D&S1865 as Sehirus bicolor.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported sweeping, on and at the roots of plants, under stones and buried in soil; in gardens (n), on the edge of fields, in chalk pits and on waste ground. It has also been taken in a suction trap and in ant nests (n). Specific plant associations include Ballota (n), Lamium (n), Stachys (n), Alliaria (n), Stellaria (n), Lychnis, Heracleum, Rubus, Rumex, potatoes, ivy, figwort, cow-parsley, Artemisia and apple blossom. There are also records from flood debris, and in a Deschampsia tuft. It has been seen feeding on the young seed heads of Ballota nigra (n), inserting the rostrum at the base of the calyx. In culture, eggs have been seen laid in soil, under stones and under leaves with the adult guarding them; and hatched nymphs have been seen feeding on the nutlets of the calyces and outside the calyces of the supplied Lamium.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						3
April	1	2	8	3	9	6
May	5	11	7	3	6	5
June	4	1	1 N	3 N	1 N	
July	N	2 N		1	1 N	4
August			1			3
September	2	1 N	2 N	1		
October						
November	1		1	1		
December						



## Tritomegas sexmaculatus (Rambur) (Cydnidae)

Common name. The Scarce Pied Shieldbug.

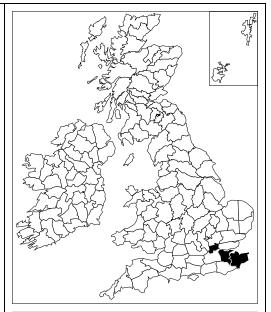
First report. HN17/18:4-5 as Tritomegas sexmaculatus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily on black horehound (n), with one record for nymphs on white dead-nettle.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June					1	
July	2					
August			1		N	
September						2
October						
November						
December						

No habitus images are available.

# A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (5) THE FAMILY THYREOCORIDAE

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#### Introduction

This is the fifth part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Thyreocoridae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

#### **Heximonth records**

Thyreocoris scarabaeoides (Linnaeus) (Thyreocoridae)

03A: 4 March 1977 [S. Heighton, East Sussex. PTBENHS17:18-19]

03D: 18 March 1923 [Brasted, Kent. LondonHets]

03F: 28 March 1907 [Weybridge, Surrey. LondonHets]

04A: 4 April 1995 [Whitedowns, Surrey. EMM133:79-80]

04B: 10 April 1903 [Boxhill, Surrey. LondonHets] 9 April 1892 [Old Camp, Westridge Wood, near Wotton-under-Edge. EMM28:135]

04C: 12 April 1952 [Otford, Kent. LondonHets]

04D: 17 April 1954 [Juniper Valley, Boxhill, Surrey. PTSLENHS1954-55:77-78]

04E: 23 April 1905 [Headley Lane, Surrey. LondonHets]

04F: 30 April 1932 [Chipstead, Surrey. LondonHets]

05A: 5 May 2005 [Crooks Peak, near Cheddar, VC6. HN5:6] 3 May 1992 [White Hill, Mickleham, Surrey. BJENH7:175]

05C: 14 May 1932 [Ballyteige Burrows, Co Wexford. IrelandHets] 13 May 1950 [Colley Hill district, Surrey. LondonHets]

05D: 19 May 1934 [Ballyteige Burrows, Co Wexford. IrelandHets] 16 May 2014 [Brandon, VC26. Hem3:92] 18 May 1955 [Otford, Kent. LondonHets]

05F: 31 May 1930 [Boxhill, Surrey. LondonHets]

06A: 3 June 1951 [Booker, near High Wycombe, Buckinghamshire. EMM87:236]

06D: 19 June 1993 [Mount Caburn NNR, Glynde, Sussex. BJENH8:88-90]

06E: 25 June 1966 [Great Culand Chalk Pit, Burham, Kent. PTSLENHS1966:118]

07C: 13 July 1907 [Box Hill. PSLENHS1907-08:67-69]

07F: 28 July 2003 [Cove Farm, fields near Haxey, VC54. Hem3:83] 28 July 2011 [Near Hitchcopse Pit NR, VC22. Hem2:47]

08D: 16 August 1952 [Banstead Wood, Surrey. LondonHets] 20 August 2005 [Magdalen North Down, VC12. Hem3:103] 17 August 1985 [Newborough Warren NNR, Anglesey. HSGN6:3]

08F: 29 August 1897 [Near Box Hill, Surrey. Adults and nymph. EMM34:13-15]

09B: 10 September 1950 [Odstock, Wiltshire. EMM88:45]

09C: 11 September 1942 [Chagford, Devon. Adults. EMM82:24] 12 September 1953 [Juniper Valley, Boxhill, Surrey. PTSLENHS1953-54:91-92] 11 September 1896 [Shere, Surrey. LondonHets]

09D: 17 September 1944 [Sundon, Bedfordshire. EMM81:183-185]

09F: 27 September 1908 [Chipstead, Surrey. LondonHets]

10A: 1 October 1865 [Mickleham, Surrey. LondonHets]

## **Detailed records**

Thyreocoris scarabaeoides (Linnaeus) (Thyreocoridae)

In grass tussock [S. Heighton, East Sussex. 4 March 1977. PTBENHS17:18-19]

Amongst moss growing on a steep chalk slope [Whitedowns, Surrey. 4 April 1995. EMM133:79-80]

Under stones [Juniper Valley, Boxhill, Surrey. 17 April 1954. PTSLENHS1954-55:77-78]

Crawling over low plants in a woodland clearing [White Hill, Mickleham, Surrey. 3 May 1992. BJENH7:175]

On dunes [Ballyteige Burrows, Co Wexford. 14 May 1932. IrelandHets]

On dunes amongst moss in company with the ant *Tetramorium caespitum* [Ballyteige Burrows, Co Wexford. 19 May 1934. IrelandHets]

Sweeping chalk grassland [Booker, near High Wycombe, Buckinghamshire. 3 June 1951. EMM87:236]

Sweeping in a derelict field [Near Hitchcopse Pit NR, VC22. 28 July 2011. Hem2:47]

Shaking dog-violet growing amongst moss on a hill slope. Sifting the moss did not produce the bug [Near Box Hill, Surrey. 29 August 1897. Adults and nymph. EMM34:13-15]

Beneath two inches of dry soil in an earth bank dividing two fields [Chagford, Devon. 11 September 1942. Adults. EMM82:24]

On slopes [Juniper Valley, Boxhill, Surrey. 12 September 1953. PTSLENHS1953-54:91-92]

On decayed paper on refuse dump [Sundon, Bedfordshire. 17 September 1944. EMM81:183-185] Chalk grassland [Aldbury Nowers NR, VC20. HN8:12]

Under or near hairy violet (*Viola hirta*) on chalk downland [Bedfordshire Chilterns. Spring 1997. EMM134:52]

On sand dunes [Berrow, Somerset. September 1953. Nymphs. EMM91:75]

On chalk downs [Birling, Kent. LondonHets]

On the seashore [Blackpool. Ent46:176]

On hill slopes [Box Hill. S&L1959]

Heard to emit a song in culture [Box Hill, Surrey. April 1953. Males and females. EMM90:49-56]

At roots of grass [Buckland Hill, Surrey. LondonHets] In moss on chalk grassland [Church Hill, Therfield Heath NR, VC20. September. HN8:12]

Is a sand dune habitat [Co Waterford. 2004. HN23:13]

In coastal dunes [Co Wexford. S&L1959]

On the ground [Devon. September. Adults. S&L1959]

On hill slopes [Folkestone. June. EMM6:183]

In moss [Mickleham. April. EMM7:184-185]

On sand-hills [Near Burnham. D&S1865]

From scattered vegetation growing in a sandy area of a filled-in quarry [Near Cothill, VC22. 5/11 July 2017. Adult/nymph. Hem6:221]

From a hedge [Near Faversham, Kent. 1903. EMM40:100-103]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. May 2005. HN5:7]

In moss on hedge banks [Near Tring. September 1899. EMM35:270]

Under *Ononis* [Pendine Burrows, Carmarthenshire. 1906. EMM48:108-111]

On sands/burrows [Pendine Sands, South Wales. EMM88:22]

On coast sandhills [Pendine, Carmarthenshire. Butler1923]

Under fallen leaves [Purley Downs, Surrey. Spring. LondonHets]

In moss [Reigate Hill. Saunders 1892]

In a heap of flint stones [Rotherfield Peppard, Henley-on-Thames. Early spring 1902. EMM39:17-18]

From dry sites using a towed suction sampler (DragVac) [Southern England. 2012. BJENH26:217-218]

## **Bibliography**

Thyreocoris scarabaeoides (Linnaeus) (Thyreocoridae)

- as Corimelaena Scarabaeoides D&S1865
- as *Corimelaena scarabaeoides* EMM28:135, EMM34:13-15, EMM35:270, EMM39:17-18, EMM40:100-103, EMM44:275, EMM44:32-34, EMM51:220, EMM6:183, EMM69:234-245, EMM7:184-185, Ent36:197, PSLENHS1903:47, PSLENHS1907-08:67-69, Saunders1892, Synopsis1875
- as T. scarabaeoides EMM81:253-273
- as Thy. scarabaeoides EMM91:7-27
- as *Thyreocoris scarabaeoides* BJENH26:217-218, BJENH7:175, BJENH8:207, BJENH8:88-90, Butler1923, CornwallHets, EMM133:79-80, EMM134:52, EMM48:108-111, EMM60:265-268, EMM60:39, EMM81:183-185, EMM82:24, EMM87:236, EMM88:22, EMM88:45, EMM90:49-56, EMM91:75, Ent47:146-147, ERJV123:161-162, ERJV125:70-72, GloucsHets, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:93, Hem2:12, Hem2:31, Hem2:47, Hem3:1, Hem3:103, Hem3:22, Hem3:23, Hem3:40, Hem3:74, Hem3:83, Hem3:92, Hem4:101, Hem4:127, Hem4:130, Hem4:2, Hem4:26, Hem4:68, Hem4:85, Hem5:1, Hem5:101, Hem5:119, Hem5:148, Hem5:16, Hem5:191, Hem5:26, Hem5:39, Hem5:53, Hem5:69, Hem5:92, Hem6:11, Hem6:221, Hem6:271, Hem6:276, HN17/18:26, HN2:6, HN21:9, HN23:13, HN6:2, HN7:11, HN8:12, HSGN13:11, HSGN6:3, HSGN7:2, HSGN7:4, LondonHets, PTBENHS17:18-19, PTSLENHS1950-51:67, PTSLENHS1952-53:85-86, PTSLENHS1953-54:91-92, PTSLENHS1954-55:77-78, PTSLENHS1962:123-183, S&L1959, TSBE1:51-84, TSBE11:245-280, TSBE16:1-48
- as Thyreocoris scarabaoeides HN5:6, HN5:7
- as Thyreocoris scaraboides Ent46:176, ERJV25:214, PTSLENHS1966:118
- as Tyreocoris scarabaeoides IrelandHets

## **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above.

Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

# Thyreocoris scarabaeoides (Linnaeus) (Thyreocoridae)

Common name. The Pill Shieldbug.

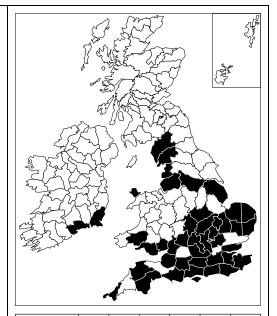
First report. D&S1865 as Corimelaena Scarabaeoides.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Found sweeping, amongst moss, under leaves, at roots of plants, buried in soil and amongst stones; in woods, fields, chalk downs, hedges, sandy ground and sandhills (n). There is a winter record from a grass tussock. Specific plant associations include violets (n) and Ononis.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March	1			1		1
April	1	2	1	1	1	1
May	2		2	3		1
June	1			1	1	
July			1			2
August				3		1 N
September		1	3	1		1
October	1					
November						
December						



# A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (6) THE FAMILY SCUTELLERIDAE

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#### Introduction

This is the sixth part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Scutelleridae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

#### **Heximonth records**

Eurygaster maura (Linnaeus) (Scutelleridae)

05B: 7 May 1961 [Deal, Kent. PTSLENHS1961:75-76]

05C: 15 May 2014 [Braeburn Park. BJENH29:69-88]

05E: 24 May 1948 [Cold Harbour, Surrey. LondonHets]

05F: 26 May 2006 [Crayford Stadium Rough, West Kent. BJENH20:193-194]

06B: 9 June 2014 [Braeburn Park. BJENH29:69-88] 9 June 2004 [Rochester. BJENH18:209]

06C: 14 June 2012 [Braeburn Park. BJENH29:69-88]

06D: 18 June 2014 [Darenth. BJENH29:69-88]

06E: 25 June 1966 [Great Culand Chalk Pit, Burham, Kent. PTSLENHS1966:118]

06F: 29 June 1950 [Bookham Common, Surrey. Nymph. LondonHets]

07A: 4 July 1954 [Coulsdon. EMM90:xxxix] 1 July 1951 [Otford, Kent. LondonHets]

07D: 19 July 1953 [Bookham Common, Surrey. Nymph. LondonHets]

07E: 21 July 1941 [Boxhill, Surrey. LondonHets]

07F: 28 July 1954 [Park Downs, Banstead, Surrey. Nymphs reared in culture. EMM92:47-48]

08A: 2 August 2000 [Colekitchen Down, Gomshall, Surrey. Nymphs. EMM137:231-232] 1 August 1953 [Riddlesdown, Surrey. Nymph. LondonHets]

08D: 19 August 1935 [Otford, Kent. LondonHets] 17 August 1962 [Swanscombe, Kent. LondonHets]

08E: 21 August 1997 [Sandwich Bay, Kent. EMM137:231-232]

08F: 27 August 1950 [Boxhill, Surrey. LondonHets]

- 09B: 9 September 2011 [Braeburn Park. BJENH29:69-88]
- 09E: 23 September 1951 [Farningham Woods, Kent. PTSLENHS1951-52:81]

# Eurygaster maura/testudinaria AMBIGUOUS (Scutelleridae)

- 03C: 15 March 1924 [Otford, Kent. LondonHets]
- 06E: 24 June 1875 [G. Wooton (Glanvilles Wootton). EMM69:234-245]
- 07C: 13 July 1934 [Derrynane, South Kerry. Nymph. IrelandHets]
- 07E: 25 July 1928 [River Suir, Clonmel, South Tipperary. Nymph. IrelandHets]
- 07F: 30 July 1905 [Headley Lane, Surrey. LondonHets]
- 08B: 10 August 1907 [Parkhurst Forest, Isle of Wight. HantsHets]
- 08D: 20 August 1926 [Dorking, Surrey. LondonHets]
- 09A: 2 September 1906 [Reigate, Surrey. LondonHets]
- 09B: 9 September 1923 [Dungeness, Kent. Adult and nymphs. EMM62:39-40]

### Eurygaster testudinaria (Geoffroy) (Scutelleridae)

- 03C: 12 March 1933 [Youghal, East Cork. Adult and nymph. IrelandHets]
- 04F: 28 April 1996 [Holywell Dunes, Cornwall. CornwallHets]
- 05B: 10 May 1994 [Horley, Surrey. Purplish-red form. BJENH7:108]
- 05E: 24 May 2007 [Brandon Marsh NR, VC38. Hem3:92] 23 May 1990 [Chapel Porth, Cornwall. CornwallHets]
- 05F: 29 May 2000 [Millook Valley, Cornwall. CornwallHets] 31 May 2006 [Thames Path at Thames Bridge, Wolvercote, Oxford, VC23. Hem2:25]
- 06A: 3 June 1951 [Booker, near High Wycombe, Buckinghamshire. EMM88:83]
- 06B: 6 June 2014 [Whistley Wood, Northamptonshire. Hem2:26]
- 06C: 13 June 1995 [Frenchman's Creek, Cornwall. CornwallHets] 11 June 1900 [Glandore, West Cork. IrelandHets] 12 June 2005 [Stowe Wood, Cornwall. CornwallHets] 15 June 2015 [The Chase, Broad Layings, VC12. Hem3:53]
- 06D: 19 June 1998 [Seaton Valley, Cornwall. CornwallHets]
- 06E: 21 June 1989 [Cotehele Estate, Calstock, Cornwall. CornwallHets]
- 06F: 26 June 1999 [Cabilla Woods, Cornwall. CornwallHets] 28 June 1994 [Porthguarnon, Cornwall. CornwallHets]
- 07B: 7 July 2006 [Goonhilly Downs, Cornwall. CornwallHets] 9 July 1900 [River Slaney, Killurin, Co Wexford. IrelandHets]
- 07C: 12 July 2006 [Hudder Down, Cornwall. CornwallHets] 13 July 2006 [Mullion Cliffs, Cornwall. CornwallHets] 13 July 2008 [West Oxfordshire. Including nymphs. HN13:9]
- 07D: 18 July 2006 [Cotehele Estate, Calstock, Cornwall. CornwallHets] 19 July 1983 [Lakenheath Warren, VC26, Hem4:18]
- 07E: 24 July 2009 [Goonhilly NNR, VC1. HN15:12] 24 July 1994 [Loggans Moor, Cornwall. CornwallHets]
- 07F: 29 July 1924 [Glengarriff, West Cork. IrelandHets] 26 July 1998 [Gribbin Head, Cornwall. CornwallHets] 30 July 1981 [Mullion Quarry, Cornwall. CornwallHets]
- 08A: 3 August 2006 [Carnweather Point, St Minver Highlands, Cornwall. CornwallHets] 2 August 2005 [Leigh Woods, VC6. Adult and nymphs. HN6:14] 1 August 2001 [Maen Dower, Cornwall. CornwallHets]
- 08B: 9 August 2006 [Cubert Common, Cornwall. CornwallHets] 7 August 2006 [Porth Joke, Cubert, Cornwall. CornwallHets]
- 08C: 15 August 2015 [South Norwood Country Park, London. Nymphs reared in culture. BJENH29:122-125]
- 08D: 20 August 2002 [Penhale Dunes, Cornwall. CornwallHets] 18 August 1919 [St Minver, Cornwall. CornwallHets]
- 08E: 22 August 1983 [Emer Bog NR, VC11. Hem3:103] 24 August 1999 [Trevega Cliff, Cornwall. CornwallHets]
- 08F: 31 August 2012 [Maulden Wood, VC30. HN19/20:11]
- 09A: 1 September 2002 [Downas Cove, Cornwall. CornwallHets] 2 September 2015 [Foxley Wood, VC27. Hem4:40] 1 September 1919 [St Teath, Cornwall. CornwallHets]

- 09B: 9 September 2013 [East Walton Common, VC28. Hem4:37] 6 September 1929 [Waterford, Co Waterford. IrelandHets]
- 09C: 11 September 1923 [Wicken Fen. ERJV47:13-14]
- 09D: 20 September 1992 [Goonhilly Downs, Cornwall. CornwallHets] 16 September 1934 [Wicken Fen. EMM71:113-114] 19 September 1909 [Wicken Fen. ERJV47:13-14]
- 09E: 23 September 2015 [Horse Down, Nr. Tilshead, VC8. Hem3:103]
- 09F: 29 September 2004 [Clitters Wood, Gunnislake, Cornwall. CornwallHets]
- 10C: 11 October 1960 [Chobham, Surrey. LondonHets]

## Odontoscelis fuliginosa (Linnaeus) (Scutelleridae)

- 05B: 7 May 1961 [Deal, Kent. PTSLENHS1961:75-76]
- 06F: 26 June 2014 [Reculver Cliff, VC15. Male. HN22:5]
- 07E: 21 July 1997 [Sandwich Bay, Kent. Including a melanic female. EMM134:265-266]
- 07F: 31 July 1977 [Deal Sandhills, Kent. PTBENHS17:18-19]
- 09B: 10 September 2003 [Castlemartin Peninsula, Pembrokeshire. Adult. BJENH19:97-103] 10 September 2003 [Castlemartin Peninsula, Pembrokeshire. Nymph. BJENH19:97-103] 8
  - September 2003 [Castlemartin Peninsula, Pembrokeshire, Nymphs, BJENH19:97-103] 9
  - September 2003 [Castlemartin Peninsula, Pembrokeshire. Nymphs. BJENH19:97-103]
- 09C: 11 September 2003 [Castlemartin Peninsula, Pembrokeshire. Adult and nymphs.
  - BJENH19:97-103] 11 September 2003 [Castlemartin Peninsula, Pembrokeshire. Nymph.
  - BJENH19:97-103] 11 September 2003 [Castlemartin Peninsula, Pembrokeshire. Nymphs.
  - BJENH19:97-103] 12 September 2003 [Castlemartin Peninsula, Pembrokeshire. Adult. BJENH19:97-103] 12 September 2003 [Castlemartin Peninsula, Pembrokeshire. Adults.
  - BJENH19:97-103] 12 September 2003 [Castlemartin Peninsula, Pembrokeshire. Adults. BJENH19:97-103] 12 September 2003 [Castlemartin Peninsula, Pembrokeshire. Adult and
  - nymphs. BJENH19:97-103] 12 September 2003 [Castlemartin Peninsula, Pembrokeshire.
  - Nymph. BJENH19:97-103]

## Odontoscelis lineola Rambur (Scutelleridae)

- 05A: 1 May 2002 [Rock Sandhills, Cornwall. Nymph. CornwallHets] 3 May 1958 [Witley Common, Surrey. Adults and nymphs. Ent92:6-13]
- 05E: 21-22 May 1960 [Witley Common, Surrey. Nymphs. PTSLENHS1960:11]
- 06B: 8 June 1956 [Constantine Bay, Cornwall. CornwallHets] 10 June 1956 [Penhale Sands, Cornwall. Adults and nymphs. CornwallHets]
- 06C: 11 June 1965 [Brancaster, Norfolk. EMM104:256] 13 June 1989 [Braunton Burrows, North Devon. BJENH4:119-121]
- 06E: 23 June 2003 [Gwithian Towan, Cornwall. CornwallHets] 21 June 1909 [Lowestoft district. EMM45:253-254]
- 07C: 15 July 1998 [Frensham Common, Surrey. BJENH12:179]
- 07D: 19 July 1997 [Crooksberry Common, Surrey. EMM134:265-266]
- 07F: 29 July 1999 [Holywell Dunes, Cornwall. CornwallHets] 30 July 2004 [Penhale Dunes, Cornwall. CornwallHets]
- 08B: 7 August 2002 [Harbour Cove, Cornwall. CornwallHets] 7 August 1996 [Near Oakhanger, North Hampshire. Adults and nymphs. EMM133:175-176]
- 08C: 14 August 1996 [The Warren, Near Oakhanger, North Hampshire. EMM133:175-176]
- 08E: 24 August 1968 [Brancaster, Norfolk. EMM104:256] 22 August 1998 [Constantine Bay, Cornwall. CornwallHets]
- 09B: 10 September 1997 [Brancaster Dunes, West Norfolk. BJENH11:110]

#### **Detailed records**

## Eurygaster austriaca (Schrank) (Scutelleridae)

At the roots of grass on sand-hills [Deal. September 1872. EMM9:192-193]

On sandhills [Deal. September 1885. EMM26:81-82]

Eurygaster maura (Linnaeus) (Scutelleridae)

Sweeping a brownfield site [Braeburn Park. 15 May 2014. BJENH29:69-88]

Brownfield site [Crayford Stadium Rough, West Kent. 26 May 2006. BJENH20:193-194]

Sweeping a brownfield site [Braeburn Park. 9 June 2014. BJENH29:69-88]

Sweeping overgrown and derelict railway sidings [Rochester. 9 June 2004. BJENH18:209]

Sweeping a brownfield site [Braeburn Park. 14 June 2012. BJENH29:69-88]

Sweeping a brownfield site [Darenth. 18 June 2014. BJENH29:69-88]

Sweeping a patch of *Centaurea nigra*. In culture, fed on the seeds of grasses, heads of knapweed and buds and fruits of *Hypericum* [Park Downs, Banstead, Surrey. 28 July 1954. Nymphs reared in culture. EMM92:47-48]

In rough grassland on chalk [Colekitchen Down, Gomshall, Surrey. 2 August 2000. Nymphs. EMM137:231-232]

On ground in fore-dunes [Sandwich Bay, Kent. 21 August 1997. EMM137:231-232]

In grass on hillside [Boxhill, Surrey. 27 August 1950. LondonHets]

Sweeping a brownfield site [Braeburn Park. 9 September 2011. BJENH29:69-88]

Sweeping grasses on hill slopes [Box Hill, Betchworth and Ranmore. August. S&L1959]

On sandhills [Coast north of Deal, East Kent. September 2004. HN4:4]

From old railway sidings with sparse, ruderal vegetation on sandy ground [Cricklewood, North London. 2001. BJENH17:15-23]

Under stones in fields [Redstone, Reigate, Surrey. LondonHets]

# Eurygaster maura/testudinaria AMBIGUOUS (Scutelleridae)

In marsh by a river [River Suir, Clonmel, South Tipperary. 25 July 1928. Nymph. IrelandHets]

Chalk pits [Dorking, Surrey. 20 August 1926. LondonHets]

Sweeping [Reigate, Surrey. 2 September 1906. LondonHets]

On Comarum palustre [Dungeness, Kent. 9 September 1923. Adult and nymphs. EMM62:39-40]

On railway bank [Brockley, Kent. 1894. LondonHets]

In a bog [Dartmoor. Butler1923]

Sweeping knapweed, etc [Dover. August. EMM26:81-82]

In sandy moss on cliffs [Dover. Spring. EMM26:81-82]

Sweeping grassy ditches on hill slopes [Folkestone. June. EMM6:183]

In a garden [Islington, London. Butler1923]

Among grass [Kenmare, South Kerry. July. Nymph. IrelandHets]

In a disused limestone quarry [Kilmacshane, Inistioge, Ireland. August 1902. IrelandHets]

In salt marsh [Lough Hyne, Ireland. IrelandHets]

Sweeping a swamp [New Forest. May 1895. EMM31:192-194]

Sweeping tall plants in a marsh [Trebarwith. Butler1923]

In marsh by banks of canal [Woking, Surrey. July 1897. LondonHets]

#### Eurygaster testudinaria (Geoffroy) (Scutelleridae)

In marsh [Youghal, East Cork. 12 March 1933. Adult and nymph. IrelandHets]

On a roadside verge [Horley, Surrey. 10 May 1994. Purplish-red form. BJENH7:108]

Sweeping water meadow [Thames Path at Thames Bridge, Wolvercote, Oxford, VC23. 31 May 2006. Hem2:25]

Sweeping chalk grassland [Booker, near High Wycombe, Buckinghamshire. 3 June 1951. EMM88:83]

Sweeping a woodland ride [Whistley Wood, Northamptonshire. 6 June 2014. Hem2:26]

Sweeping/beating along woodland rides and in clearings [The Chase, Broad Layings, VC12. 15 June 2015. Hem3:53]

Marshy pastures [Cotehele Estate, Calstock, Cornwall. 21 June 1989. CornwallHets]

On *Phragmites* in marsh by a river [River Slaney, Killurin, Co Wexford. 9 July 1900. IrelandHets]

Sweeping a roadside verge [West Oxfordshire, 13 July 2008, Including nymphs, HN13:9]

Marshy pastures [Cotehele Estate, Calstock, Cornwall. 18 July 2006. CornwallHets]

In meadow [Glengarriff, West Cork. 29 July 1924. IrelandHets]

Sweeping a meadow. Fed on wall barley and knapweed in culture [South Norwood Country Park, London. 15 August 2015. Nymphs reared in culture. BJENH29:122-125]

Sweeping managed grass heath [Maulden Wood, VC30. 31 August 2012. HN19/20:11]

On flowers in a dry quarry [Waterford, Co Waterford. 6 September 1929. IrelandHets]

Sweeping [Wicken Fen. 16 September 1934. EMM71:113-114]

On the lower slopes [Blows Downs, VC30. HN19/20:11]

By a pool [Dolgoth Quarry NR, near Llynclys, VC40. HN22:11]

Sweeping mixed vegetation in a small copse [Near Flatford Mill, Suffolk. Female. EMM90:48]

On knapweed [Parkhouse Forest, Isle of Wight. EMM92:47-48]

On Dewberry (*Rubus caesius*) in a forest [Pembrey Forest, Carmarthenshire. August 1961. EMM97:200]

In a water meadow [Shapwick, North Somerset. September 1962. EMM98:263]

On Myrica Gale [Wicken Fen. August 1902. Male and females. EMM68:261]

## Odontoscelis fuliginosa (Linnaeus) (Scutelleridae)

At roots of storksbill (*Erodium*) and hop trefoil (*Trifolium campestre*) [Sandwich Bay, Kent. 21 July 1997. Including a melanic female. EMM134:265-266]

Under herbage near sea wall [Deal Sandhills, Kent. 31 July 1977. PTBENHS17:18-19]

High dune slope [Castlemartin Peninsula, Pembrokeshire. 10 September 2003. Adult. BJENH19:97-103]

Under Stork's-bill [Castlemartin Peninsula, Pembrokeshire. 10 September 2003. Nymph. BJENH19:97-103]

Under Stork's-bill on fixed dune [Castlemartin Peninsula, Pembrokeshire. 8 September 2003. Nymphs. BJENH19:97-103]

Sand scrape [Castlemartin Peninsula, Pembrokeshire. 11 September 2003. Adult and nymphs. BJENH19:97-103]

Under Stork's-bill in an abandoned sand quarry [Castlemartin Peninsula, Pembrokeshire. 11 September 2003. Nymph. BJENH19:97-103]

Under Stork's-bill in sand scrape [Castlemartin Peninsula, Pembrokeshire. 11 September 2003. Nymphs. BJENH19:97-103]

Dune slope [Castlemartin Peninsula, Pembrokeshire. 12 September 2003. Adult. BJENH19:97-103]

Under Yellow Melilot, Marram and Birds-foot Trefoil [Castlemartin Peninsula, Pembrokeshire. 12 September 2003. Adults. BJENH19:97-103]

Suction sampling a limestone escarpment [Castlemartin Peninsula, Pembrokeshire. 12 September 2003. Adult and nymphs. BJENH19:97-103]

Rabbit scrape [Castlemartin Peninsula, Pembrokeshire. 12 September 2003. Nymph. BJENH19:97-103]

In evolved coastal dunes [Britain. S&L1959]

In sheltered parts of dunes [Britain. Winter. Nymphs. S&L1959]

In pitfall trap on soft-rock cliff [Castlemartin Peninsula, Pembrokeshire. June/July 2003. Adults. BJENH19:97-103]

Amongst moss on sandhills [Deal. Butler1923]

Under *Erodium* on sandhills [Deal sandhills, Kent. June/July 1930. EMM71:42-43]

On sand dunes [Deal, Kent. June 1962. PTSLENHS1962:16]

Under *Erodium cicutarium* on sandhills [Freshwater West, Pembrokeshire. August/September 1939. Adult. EMM80:61]

Sand dunes [Gower. HN9:5]

Associated with Erodium cicutarium [Pembrokeshire. 1990. HSGN12:8]

Sand dunes [South Pembrokeshire. HN9:4]

In sandy parts [Suffolk Breck. S&L1959]

Pitfall traps [Sutton Hoo, East Suffolk. June/July 1998. BJENH12:179]

Odontoscelis fuliginosa/lineola AMBIGUOUS (Scutelleridae)

On sandhills [Deal. July & August 1882. EMM19:85-88]

Sandhills [Deal. Males and females. EMM26:81-82]

Sandhills [Deal. Synopsis1875]

Sandhills [Deal, Kent and Burnham, Norfolk. Saunders 1892]

On the sandhills [Felixstowe, Suffolk. June 1896. SuffolkHets]

On the sands [North of Lowestoft, Suffolk. SuffolkHets]

### Odontoscelis lineola Rambur (Scutelleridae)

From sandy patches thinly covered with fine grass and studded with minute rosettes of *Trifolium arvense* and *Erodium cicutarium* agg [Witley Common, Surrey. 3 May 1958. Adults and nymphs. Ent92:6-13]

Feeding on *Erodium*. Continued to feed on the plant in culture [Witley Common, Surrey. 21-22 May 1960. Nymphs. PTSLENHS1960:11]

In a small hollow [Constantine Bay, Cornwall. 8 June 1956. CornwallHets]

In a salt marsh [Brancaster, Norfolk. 11 June 1965. EMM104:256]

Sand dunes [Braunton Burrows, North Devon. 13 June 1989. BJENH4:119-121]

Under *Erodium* in a sandy spot several miles from the coast [Lowestoft district. 21 June 1909. EMM45:253-254]

Rabbit-grazed turf beside sandy path [Frensham Common, Surrey. 15 July 1998. BJENH12:179] On storksbill (*Erodium*) on a small area of bryophyte heath [Crooksberry Common, Surrey. 19 July 1997. EMM134:265-266]

Under common stork's-bill [Penhale Dunes, Cornwall. 30 July 2004. CornwallHets]

Associated with Birdsfoot (*Ornithopus perpusillus*) on a sandy building plot [Near Oakhanger, North Hampshire. 7 August 1996. Adults and nymphs. EMM133:175-176]

Associated with *Erodium cicutarium* growing on open bryophyte dominated heathland [The Warren, Near Oakhanger, North Hampshire. 14 August 1996. EMM133:175-176]

Under moss on sand dunes [Brancaster, Norfolk. 24 August 1968. EMM104:256]

In dunes [Constantine Bay, Cornwall. 22 August 1998. CornwallHets]

Sandy, sparsely vegetated areas [Bedfordshire. BJENH18:208]

In evolved sandy places, at or near the coast [Britain. S&L1959]

In moss on sandhills [Camber, near Rye, Sussex. 1913. Nymphs. Butler1923]

Under *Erodium* on sandhills [Camber, near Rye, Sussex. Adults. Butler1923]

On sandhills [Coast north of Deal, East Kent. September 2004. HN4:4]

Breeding colonies in association with *Erodium* on sandhills [Coast of Devon and Cornwall. July 1957. EMM94:24]

Under *Erodium cicutarium* [Constantine Bay, Cornwall. June 1956. Adults and nymphs. EMM92:372-374]

On sand dunes [Deal, Kent. June 1962. PTSLENHS1962:16]

In dry gravel workings [Near Ipswich, Suffolk. ERJV95:205-207]

Under *Erodium cicutarium* [Penhale sands, Cornwall. June 1956. Adults and nymphs. EMM92:372-374]

At the roots of marram grass on the foreshore; running in the open; and under *Erodium cicutarium* [Sandwich Bay, Kent. June/July 1930. EMM71:42-43]

## **Bibliography**

Eurygaster austriaca (Schrank) (Scutelleridae)

- as E. austriacus EMM81:253-273
- as Eury. a. austriacus EMM91:7-27
- as *Eurygaster austriaca* Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem3:1, Hem4:131, Hem4:2, Hem4:68, Hem5:1, Hem5:101, Hem6:11, HN9:2, HSGN1:4, HSGN7:3, HSGN8:8, PTSLENHS1962:123-183, S&L1959
- as Eurygaster austriacus austriacus TSBE11:245-280
- as Eurygaster austriacus var. frischii HantsHets
- as Eurygaster hottentottus D&S1865, EMM8:60-63
- as Eurygaster hottentotus EMM69:234-245

- as Eurygaster niger EMM26:81-82, EMM8:60-63, Synopsis1875
- as Eurygaster nigra EMM36:94-101, EMM43:196-202, EMM9:192-193, Saunders1892
- as Eurygaster nigrocucullata Butler1923, EMM43:196-202, HantsHets

### Eurygaster maura (Linnaeus) (Scutelleridae)

- as E. maurus EMM81:253-273, EMM82:94-95
- as Eury. maurus EMM91:7-27
- as Eurygaster maura BJENH17:15-23, BJENH18:209, BJENH20:193-194, BJENH29:69-88, EMM137:231-232, EMM63:251-254, EMM68:261, Ent67:129-130, ERJV47:13-14, GloucsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem2:31, Hem2:41, Hem3:1, Hem3:15, Hem3:40, Hem4:101, Hem4:131, Hem4:2, Hem4:68, Hem5:1, Hem5:101, Hem5:119, Hem5:191, Hem5:25, Hem5:40, Hem5:53, Hem5:92, Hem6:11, HN4:4, HSGN13:13, HSGN8:8, LondonHets, PTBENHS19:55, PTSLENHS1950-51:77-78, PTSLENHS1961:75-76, PTSLENHS1962:123-183, PTSLENHS1966:118, S&L1959
- as *Eurygaster maurus* EMM74:20-21, EMM87:236, EMM88:83, EMM90:xxxix, EMM92:47-48, PTSLENHS1951-52:43-44, PTSLENHS1951-52:81, PTSLENHS1952-53:49-50, TSBE1:51-84, TSBE11:245-280

### Eurygaster maura/testudinaria AMBIGUOUS (Scutelleridae)

- as *Eurygaster maura* Butler1923, EMM35:291-292, EMM51:220, EMM62:39-40, Ent27:222, Ent29:292, Ent59:84-85, HantsHets, LondonHets, Saunders1892
- as *Eurygaster maurus* APSLENHS1896:54, D&S1865, EMM18:113, EMM26:81-82, EMM31:192-194, EMM6:183, EMM69:234-245, EMM7:137-138, Synopsis1875 as *Eurygaster testudinaria* IrelandHets

# Eurygaster testudinaria (Geoffroy) (Scutelleridae)

- as E. testudinarius EMM81:253-273, EMM82:94-95
- as Eury. testudinarius EMM91:7-27
- as Eurygaster testudinaria BJENH17:186, BJENH29:122-125, BJENH4:61-62, BJENH7:108, CornwallHets, EG60:37-71, EMM63:251-254, EMM63:280, EMM68:261, EMM98:263, Ent89:223-231, Ent91:100, ERJV111:27-35, ERJV47:13-14, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem2:25, Hem2:26, Hem2:31, Hem2:41, Hem2:46, Hem3:1, Hem3:100, Hem3:103, Hem3:15, Hem3:22, Hem3:23, Hem3:40, Hem3:53, Hem3:92, Hem4:101, Hem4:131, Hem4:151, Hem4:18, Hem4:2, Hem4:27, Hem4:37, Hem4:40, Hem4:68, Hem5:1, Hem5:101, Hem5:119, Hem5:149, Hem5:191, Hem5:205, Hem5:26, Hem5:40, Hem5:53, Hem5:69, Hem5:92, Hem6:12, HN11:16, HN13:11, HN13:9, HN14:11, HN15:12, HN19/20:11, HN2:1, HN22:11, HN22:8, HN6:14, HN9:15, HSGN11:9, IrelandHets, LondonHets, PTSLENHS1962:123-183, S&L1959, TSBE1:51-84
- as *Eurygaster testudinarius* EMM71:113-114, EMM81:253-273, EMM85:152-156, EMM88:83, EMM90:48, EMM92:47-48, EMM97:200, PTSLENHS1952-53:49-50, TSBE11:245-280

# Odontoscelis fuliginosa (Linnaeus) (Scutelleridae)

- as O. fuliginosa EMM81:253-273
- as Odon. fuliginosa EMM91:7-27
- as *Odontoscelis fuliginosa* BJENH12:179, BJENH19:97-103, Butler1923, CornwallHets, EMM134:265-266, EMM69:234-245, EMM71:42-43, EMM80:61, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:12, Hem3:1, Hem3:40, Hem4:131, Hem4:2, Hem4:27, Hem4:40, Hem4:68, Hem5:1, Hem5:101, Hem5:14, Hem5:149, Hem5:26, Hem6:12, Hem6:288, HN17/18:26, HN22:5, HN4:4, HN9:15, HN9:4, HN9:5, HN9:6, HSGN1:4, HSGN10:2, HSGN12:8, HSGN8:8, PTBENHS17:18-19, PTSLENHS1961:75-76, PTSLENHS1962:123-183, PTSLENHS1962:16, S&L1959, TSBE11:245-280 as *Odontoscelis fuliginosus* EMM45:253-254, PTSLENHS1956:111-136

## Odontoscelis fuliginosa/lineola AMBIGUOUS (Scutelleridae)

as Odontoscelis fuliginosa EMM31:282, Saunders1892, SuffolkHets

as *Odontoscelis fuliginosus* D&S1865, EMM19:85-88, EMM26:81-82, EMM36:94-101, EMM7:137-138, Synopsis1875

Odontoscelis lineola Rambur (Scutelleridae)

- as O. dorsalis EMM81:253-273
- as Odon. dorsalis EMM91:7-27
- as Odontoscaelis dorsalis Ent43:45
- as *Odontoscelis dorsalis* BJENH25:205-215, Butler1923, EG12:77-79, EMM104:256, EMM45:253-254, EMM60:39, EMM69:234-245, EMM71:42-43, EMM92:372-374, EMM94:24, Ent42:325, Ent92:6-13, Ent93:215, ERJV95:205-207, HantsHets, HSGN1:5, LondonHets, PSLENHS1909-10:113, PTBENHS18:20, PTBENHS19:55, PTSLENHS1960:11, PTSLENHS1962:123-183, PTSLENHS1962:16, S&L1959, SuffolkHetsAnn, TRESL103:171-218, TSBE11:245-280
- as *Odontoscelis lineola* BJENH11:110, BJENH12:179, BJENH18:208, BJENH25:205-215, BJENH4:119-121, CornwallHets, EMM133:175-176, EMM134:265-266, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem3:1, Hem3:40, Hem4:131, Hem4:2, Hem4:27, Hem5:1, Hem5:101, Hem5:119, Hem5:14, Hem5:149, Hem5:191, Hem5:26, Hem5:40, Hem6:12, HN4:4, HSGN12:8, HSGN8:1, HSGN8:3, HSGN8:8

#### **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vicecounty Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above. Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

# Eurygaster austriaca (Schrank) (Scutelleridae) Common name. The Deal Tortoise Shieldbug. First report. D&S1865 as Eurygaster hottentottus. Ambiguities. None reported. Geographical distribution. See vice-county map opposite. Seasonal distribution. See heximonth calendar opposite. Other details. Reported twice from sandhills, with one record at the roots of grass. 6-10 11-15 16-20 21-25 January February March April May June July August September October November December No habitus images are available.

## Eurygaster maura (Linnaeus) (Scutelleridae)

Common name. The Scarce Tortoise Shieldbug.

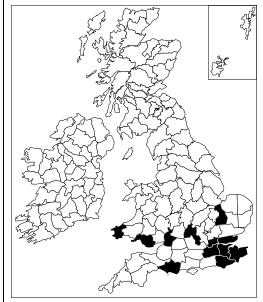
First report. D&S1865 as Eurygaster maurus.

Ambiguities. Prior to EMM63:251-254 records may refer to *Eurygaster testudinaria* (Hem3:15-17).

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sweeping brownfield sites and chalk grassland (n). Also from old railway sidings, sandhills and under stones in fields. In culture, a nymph swept from a patch of *Centaurea nigra* fed on the seeds of grasses, heads of knapweed and buds and fruits of *Hypericum*.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May		1	1		1	1
June		2	1	1	1	N
July	2			N	1	N
August	N			2	1	1
September		1			1	
October						
November						
December						

No habitus images are available.

## Eurygaster testudinaria (Geoffroy) (Scutelleridae)

Common name. The Common Tortoise Shieldbug.

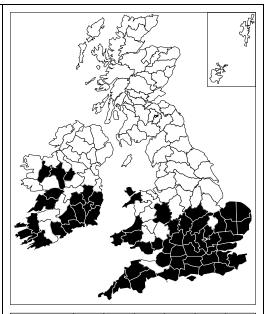
First report. EMM63:251-254 as Eurygaster testudinaria.

Ambiguities. None reported.

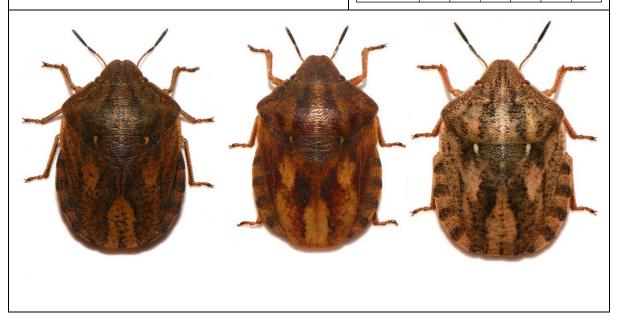
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sweeping, in marshes (n, w), meadows (n), quarries, downs, roadside verges (n) and woods. Specific plant associations include dewberry, knapweed, *Myrica gale* and *Phragmites*. In culture, nymphs fed on wall barley and knapweed.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March			1 N			
April						1
May		1			2	2
June	1	1	4	1	1	2
July		2	3 N	2	2	3
August	3 N	2	N	2	2	1
September	3	2	1	3	1	1
October			1			
November						
December						



## Odontoscelis fuliginosa (Linnaeus) (Scutelleridae)

Common name. The Streaked Shieldbug.

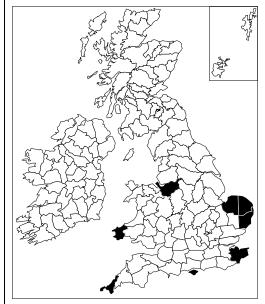
First report. D&S1865 as  $Odontoscelis\ fuliginosus.$ 

Ambiguities. Prior to EMM45:253-254 records may refer to *Odontoscelis lineola* (Hem5:14-15).

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily from under Erodium (n) on sandhills (n) and other sandy situations. Also found under moss, hop trefoil, birds-foot trefoil, yellow melilot and marram. It has been taken in a pitfall trap on a cliff, and suction sampling a limestone escarpment (n).



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May		1				
June						1
July					1	1
August						
September		1 N	4 N			
October						
November						
December						

No habitus images are available.

# Odontoscelis lineola Rambur (Scutelleridae)

Common name. The Lesser-streaked Shieldbug.

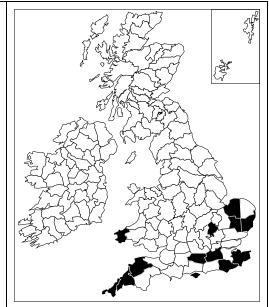
First report. EMM45:253-254 as Odontoscelis dorsalis.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily from under Erodium (n) on sandhills (n) and other sandy situations (n). Also found associated with birdsfoot (n), among moss (n), and at roots of Marram on sand; and in gravel workings and in a salt marsh. Nymphs have been seen feeding on Erodium.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May	1 N				N	
June		2 N	2		2	
July			1	1		2
August		2 N	1		2	
September		1				
October						
November						
December						

No habitus images are available.

# A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (7) THE FAMILY PENTATOMIDAE

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#### Introduction

This is the seventh part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Pentatomidae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

### **Heximonth records**

Aelia acuminata (Linnaeus) (Pentatomidae)

04A: 1 April 1950 [Near Salisbury, Wiltshire. EMM87:139]

05B: 10 May 1980 [Maidenhead, Berkshire. EMM116:132]

05C: 14 May 2000 [Cross Coombe, Cornwall. CornwallHets] 13 May 2007 [Minting Wood, VC54. HN10:13]

05D: 17 May 1997 [Dinton Pastures, Berkshire. BJENH12:43-45] 17 May 1952 [Horsley, Surrey. LondonHets] 16 May 1953 [Sheapleas, East Horsley. PTSLENHS1953-54:79-80]

05E: 21 May 2008 [Potton Heath, VC30. Adults. HN13:10] 25 May 1888 [Shere, Surrey. LondonHets]

05F: 27 May 1920 [Camberley, Surrey. LondonHets] 31 May 1920 [Camberley, Surrey. LondonHets] 29 May 1955 [Chobham Common, Surrey. LondonHets] 31 May 1979 [Maidenhead, Berkshire. EMM114:159] 27 May 2005 [Near Sandy, Bedfordshire. HN5:7]

06A: 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236] 2 June 2014 [Pentimore Wood, Northamptonshire. Hem2:26] 3 June 2000 [Treleaver Cliff, Cornwall. CornwallHets] 4 June 1951 [West End Common, Surrey. LondonHets]

06B: 9 June 2010 [Bracebridge, Lincoln, VC53. Hem3:83] 8 June 1996 [Burnham Beeches, Buckinghamshire. BJENH10:122] 6 June 2014 [Helmdon, Northamptonshire. Hem2:26] 10 June 2015 [Horsebere Brook Flood Alleviation site, Barnwood, Gloucestershire. HN23:10]

06C: 15 June 1983 [Lakenheath Warren, VC26. Hem4:18] 14 June 1998 [Treleaver Cliff, Cornwall. CornwallHets]

- 06D: 19 June 2014 [Helmdon, Northamptonshire. Hem2:26] 20 June 1979 [Rinsey East Cliff, Cornwall. CornwallHets] 19 June 1983 [Santon Warren, VC28. Hem4:18]
- 06E: 24 June 2003 [Cape Cornwall, Cornwall. CornwallHets] 25 June 2012 [Mill Lane LNR, Walsall, VC39. Hem3:92] 22 June 1993 [Port Gaverne, Cornwall. CornwallHets]
- 06F: 30 June 1963 [Weybridge, Surrey. LondonHets]
- 07A: 3 July 1953 [Near Farnham, Surrey. LondonHets]
- 07B: 8 July 1950 [Byfleet, Surrey. LondonHets] 7 July 2002 [Upton Towans, Cornwall. CornwallHets]
- 07C: 15 July 1984 [Flagstaff Quarry, near Penmon, Anglesey. EMM123:76] 13 July 1995 [Holywell Bay & Cubert Common, Cornwall. CornwallHets] 14 July 1953 [Hounslow Heath, Middlesex. Nymphs. Ent87:15-18] 13 July 1963 [Milford, Surrey. LondonHets] 11 July 2006 [Prussia Cove, Cornwall. CornwallHets]
- 07D: 20 July 1983 [Santon Warren, VC28. Hem4:18] 20 July 2009 [Sennen Cove, VC1. HN15:12] 17 July 1955 [Ynyslas, Cardiganshire. Males, females and nymphs. EMM92:54-64]
- 07F: 26 July 1953 [Hounslow Heath, Middlesex. Nymphs. EMM89:303] 31 July 2009 [Near Alderton, Gloucestershire. HN16:12]
- 08A: 1 August 2001 [Maen Dower, Cornwall. CornwallHets] 4 August 2005 [Middlewick Ranges, Colchester, Essex. HN6:8] 5 August 1934 [Worlington and Freckenham, Suffolk. EMM71:113-114]
- 08B: 9 August 1953 [Bookham Common, Surrey. Nymph. LondonHets]
- 08C: 15 August 1899 [Albury, Surrey. Butler1923] 14 August 1998 [Clitters Mine, Gunnislake, Cornwall. CornwallHets] 11 August 2012 [Narborough, VC55. Hem3:92] 15 August 2015 [South Norwood Country Park, London. BJENH29:122-125] 12 August 1949 [Woking, Surrey. LondonHets] 15 August 1955 [Ynyslas, Cardiganshire. EMM92:54-64]
- 08D: 17 August 1985 [Newborough Warren NNR, Anglesey. HSGN6:3] 18 August 2006 [Porthoustock, Cornwall. CornwallHets]
- 08E: 23 August 2005 [Baddesley Common, Warwickshire. Adults and nymphs. HN7:11] 24 August 2006 [Kynance Cove, Cornwall. CornwallHets] 22 August 1897 [Mickleham, Surrey. LondonHets] 23 August 2006 [Rinsey Cliffs, Cornwall. CornwallHets]
- 08F: 27 August 1990 [Bookham Common, Surrey. BJENH7:175] 29 August 1993 [Epsom Common, Surrey. BJENH7:175] 29 August 2008 [Maulden Wood, VC30. Adults and nymph. HN13:10]
- 09A: 4 September 1949 [Ash Vale, Surrey. PTSLENHS1949-50:78] 1 September 2002 [Downas Valley, Cornwall. CornwallHets] 5 September 1965 [Dungeness, Kent. PTSLENHS1965:91] 5 September 1877 [Lulworth. EMM69:234-245] 2 September 2003 [Penhale Dunes, Cornwall. CornwallHets] 2 September 2005 [The Moors, Colchester, Essex. HN6:8] 1 September 1941 [Woking, Surrey. LondonHets]
- 09B: 10 September 1950 [Ash Vale, Surrey. Adults and nymph. LondonHets] 10 September 1951 [West End Common, Surrey. LondonHets]
- 09D: 16 September 1986 [Daneway Banks, Gloucestershire. GloucsHets] 17 September 2018 [Near North Stoke, VC23. Hem6:219] 19 September 1998 [Woolwich Common, West Kent. ERJV111:204]
- 09E: 22 September 1991 [Downside, Leatherhead, Surrey. BJENH7:175]
- 10A: 2 October 1971 [Maidenhead, Berkshire. EMM114:159]
- 10B: 9 October 2005 [Browndown Ranges, Hampshire. BJENH19:264-265]

Carpocoris purpureipennis (De Geer) (Pentatomidae)

10A: 4 October 1995 [Winterborne, Bristol, VC34. Male. EMM137:72]

10C: 15 October 2005 [Portland Bill area, VC9. ERJV118:31-33]

Carpocoris purpureipennis/mediterraneus AMBIGUOUS (Pentatomidae)

08D: 19 August 1901 [North Essex coast. EMM38:66]

Chlorochroa juniperina (Linnaeus) (Pentatomidae)

03F: 26 March 1873 [Caterham Valley. EMM9:292]

- 04C: 15 April 1946 [Whiteparish, near Salisbury, Wiltshire. Male. EMM83:14-15]
- 06A: June 1902 [Miller's Dale, Buxton. EMM41:27]
- Dolycoris baccarum (Linnaeus) (Pentatomidae)
  - 01D: 20 January 1948 [Ashtead, Surrey. LondonHets]
  - 04A: 4 April 1896 [Roundstone, West Galway. IrelandHets]
  - 04D: 19 April 2007 [Burford, VC23. HN9:13] 20 April 1944 [Rendcomb, Gloucestershire. GloucsHets]
  - 04E: 23 April 2004 [Brede High Wood, East Sussex. HN3:6] 25 April 2004 [Brede Wood, VC14. Including mating pairs. HN7:14]
  - 04F: 28 April 1893 [Bagley Wood, near Oxford, VC22. EMM29:191-192]
  - 05A: 1 May 1944 [Crickley Hill, Gloucestershire. GloucsHets] 3 May 1997 [Warburg Nature Reserve, Bix bottom, Oxfordshire. Mating aggregation. BJENH11:52-54]
  - 05B: 7 May 1944 [Cranham, Gloucestershire. GloucsHets]
  - 05C: 14 May 1949 [Byfleet, Surrey. LondonHets] 13 May 1950 [Colley Hill district, Surrey. LondonHets] 15 May 1952 [Orpington, Kent. LondonHets]
  - 05D: 18 May 1994 [Chynhalls Cliff, Cornwall. CornwallHets] 16 May 1985 [Lower Lodge Wood NR, Gloucestershire. GloucsHets] 20 May 1934 [Pink Point, New Ross, Co Kilkenny. IrelandHets]
  - 05E: 21 May 1944 [Daneway, Gloucestershire. GloucsHets] 21-24 May 2007 [Mary Knoll Valley, Herefordshire. BJENH21:187-192] 23 May 1975 [Mylor, Cornwall. PTBENHS8:64]
  - 05F: 27 May 1950 [Church Woods, Blean, Kent. EMM86:224] 30 May 1992 [Cutsdean Quarry, Gloucestershire. GloucsHets] 27 May 2005 [Near Sandy, Bedfordshire. HN5:7] 26 May 1985 [Oakridge Lynch, Gloucestershire. GloucsHets] 30 May 1985 [Rodborough Common, Gloucestershire. GloucsHets]
  - 06A: 3 June 1951 [Booker, near High Wycombe, Buckinghamshire. EMM87:236] 4 June 2001 [Coity Mountain, VC35. Hem4:151] 5 June 1993 [Hailey Wood, Gloucestershire. GloucsHets] 3 June 1985 [Nailsworth Hill, Gloucestershire. GloucsHets] 4 June 2005 [Nanterrow, Gwithian, Cornwall. CornwallHets] 2 June 2014 [Pentimore Wood, Northamptonshire. Hem2:26]
  - 06B: 7 June 1949 [Esher Common, Surrey. LondonHets] 8 June 1985 [Overley Wood, Gloucestershire. GloucsHets] 10 June 2012 [Wye Valley, VC57. Hem3:92]
  - 06C: 11 June 2005 [Great Orme, VC49. HN6:14] 15 June 1972 [Morroch Bay, Portpatrick, Wigtownshire. EMM109:112-113] 15 June 2015 [The Chase, Broad Layings, VC12. Hem3:53]
  - 06D: 17 June [Killiney. EMM69:234-245] 17 June 1952 [Rodborough Common, Gloucestershire. GloucsHets] 19 June 1983 [Santon Warren, VC28. Hem4:18] 18 June 1983 [Two Mile Bottom, VC28. Hem4:18]
  - 06E: 24 June 1951 [Boxhill, Surrey. LondonHets] 23 June 1920 [Painswick, Gloucestershire. GloucsHets]
  - 06F: 30 June 1985 [Oakley Wood, Gloucestershire. Mating pair. GloucsHets]
  - 07A: 5 July 1944 [Starcross, South Devon. Ent88:89-91] 3 July 1989 [Towan Beach, Cornwall. CornwallHets]
  - 07B: 10 July 1953 [Pwllheli, Caernarvonshire. EMM92:54-64] 7 July 1957 [Wyre Forest, Shropshire. EMM94:93]
  - 07C: 11 July 2003 [West Pentire, West Cornwall. BJENH18:165-170]
  - 07D: 19 July 2006 [Haye Farm, St Dominick, Cornwall. CornwallHets] 20 July 1983 [Santon Warren, VC28. Hem4:18]
  - 07E: 21 July 1962 [Cowley, Gloucestershire. GloucsHets] 25 July 1952 [Esher Common, Surrey. LondonHets]
  - 07F: 28 July 1950 [Ightham, Kent. LondonHets]
  - 08A: 4 August 2005 [Carn Entral Farm, Brea, Cornwall. CornwallHets] 4 August 1949 [Reigate Hill, Surrey. LondonHets]
  - 08B: 8 August 2018 [Near Birch Hall, Langdale Forest, North York Moors. Hem6:215]
  - 08C: 13 August 1951 [Grounds of the Pest Infestation Laboratory, Slough. Nymph. EMM87:274] 15 August 1993 [Poor's Allotment, Gloucestershire. GloucsHets] 15 August 2015 [South

- Norwood Country Park, London. BJENH29:122-125] 15 August 1955 [Ynyslas, Cardiganshire. EMM92:54-64]
- 08D: 16 August 1955 [Bookham Common, Surrey. LondonHets] 19 August 1985 [Cinderford, Gloucestershire. GloucsHets] 17 August 1985 [Newborough Warren NNR, Anglesey. HSGN6:3] 16 August 1952 [Pinetum, Gloucestershire. GloucsHets] 18 August 2006 [Porthoustock, Cornwall. CornwallHets]
- 08E: 21 August 2002 [Boscaswell Cliff, Cornwall. CornwallHets] 21 August 2002 [Bossiney Cliffs, Cornwall. CornwallHets] 22 August 2006 [Lansallos East Coombe, Cornwall. CornwallHets] 23 August 1948 [Ockham Common, Surrey. Nymph. LondonHets] 23 August 1979 [Santon Warren, VC28. Hem4:18] 25 August 2005 [South Penquite Farm, Blisland, Cornwall. CornwallHets]
- 08F: 27 August 1950 [Boxhill, Surrey. LondonHets] 29 August 1994 [Dowdeswell Wood, Gloucestershire. GloucsHets] 29 August 2006 [Mawnan Church to Porth Saxon, Cornwall. CornwallHets] 26 August 2006 [Sandheap Point, Lanteglos, Cornwall. CornwallHets] 27 August 2006 [Wintringham, VC61. HN9:15]
- 09A: 3 September 1955 [Aberystwyth, Cardiganshire. EMM92:54-64] 4 September 1949 [Ash Vale, Surrey. PTSLENHS1949-50:78] 1 September 1991 [Astonbridge Hill, Gloucestershire. GloucsHets] 1 September 2002 [Downas Cove, Cornwall. CornwallHets] 2 September 2015 [Foxley Wood, VC27. Hem4:40] 2 September 1950 [Oxshott. PTSLENHS1950-51:78-79] 4 September [Three Mile Stone, near Truro, Cornwall. ERJV48:131-132] 2 September 1950 [West End Common, Surrey. LondonHets]
- 09B: 7 September 1951 [Grounds of the Pest Infestation Laboratory, Slough. Adults. EMM87:274] 6 September 1971 [Longcross Halt, Chobham Common, Surrey. EMM108:59] 10 September 1934 [New Forest. EMM71:113-114]
- 09C: 14 September 1991 [Nagshead Dean, Gloucestershire. GloucsHets]
- 09D: 20 September 1950 [Headley Lane, Surrey. LondonHets] 18 September 1993 [Midger, Gloucestershire. GloucsHets] 18 September 1957 [Stanner Rocks, Radnorshire. EMM94:183]
- 09E: 21 September 1994 [Ampney Sheephouse, Gloucestershire. GloucsHets] 21 September 1899 [Kinnoull Hill, Perth. Ent33:10] 23 September 1934 [Ovoca, Co Wicklow. IrelandHets] 22 September 1960 [Roughan Crag, Kilnaboy, Co Clare. Female. EG12:77-79]
- 10C: 14 October 1951 [Shirley, Surrey. LondonHets]
- 10D: 18 October 1997 [Burnham Beeches, Buckinghamshire. BJENH13:244-245] 16 October 2005 [Skellingthorpe Old Wood, near Lincoln, VC53. HN7:16]

# Dyroderes umbraculatus (Fabricius) (Pentatomidae)

- 06F: 29 June 2013 [Perivale Wood LNR, Middlesex. BJENH27:13-19]
- 07D: 16 July 2015 [Southampton Common, VC11. Adult. HN23:4]
- 09B: 7 September 2015 [Southampton Common, VC11. Adult. HN23:4]

#### Eurydema dominulus (Scopoli) (Pentatomidae)

- 01C: 12 January 1941 [Oaken Wood, East Malling, Kent. Males and females. EMM77:40]
- 04A: 1 April 1997 [Weymouth, Dorset. EMM136:52]
- 04C: 11 April 1959 [East Malling, Kent. EMM95:287-288]
- 05D: 17 May 1940 [Saw-Pits Lane, Oaken Wood, Barming, Kent. Male. EMM76:256]
- 05E: 21 May 1922 [Otford, Kent. LondonHets]
- 07D: 17 July 1940 [Near Saw-Pits Lane, Oaken Wood, Barming, Kent. Female. EMM76:256]
- 09D: 20 September 1992 [Holman Wood, Brede High Wood, East Sussex. BJENH10:1-2]
- 10C: 13 October 1968 [Bromley, Kent. LondonHets]

#### Eurydema oleracea (Linnaeus) (Pentatomidae)

- 04C: 13 April 2008 [Ley Park Wood, VC34. HN13:11]
- 04D: 19 April 2007 [Bristol Downs, Bristol, VC34. HN11:11]
- 04E: 25 April 2014 [Brandon, Suffolk, VC26. Hem3:92] 24 April 1954 [Esher Common, Surrey. LondonHets] 25 April 2004 [Gordon's Steps, Boscombe, VC11. Both white and red spotted

- forms. ERJV117:221-227] 22 April 1945 [Goring, Oxfordshire. Adults *in copula*. EMM81:275] 23 April 1946 [Jealotts Hill, Berkshire. Male. EG12:77-79]
- 04F: 29 April 2007 [Lawrence Weston Moor, Bristol, VC34. HN11:11]
- 05A: 1 May 2011 [Near Great Barrington, Gloucestershire. Red and white forms. HN17/18:21] 3 May 1999 [Poldhu Cove, Cornwall. Mating pair. CornwallHets] 3 May 1997 [Warburg Nature Reserve, Bix bottom, Oxfordshire. Mating aggregation. BJENH11:52-54]
- 05B: 6 May 1953 [Black Hills, Esher Common, Surrey. LondonHets] 10 May 2014 [Brandon, Norfolk, VC28. Hem3:92] 10 May 1952 [Farnham, Surrey. LondonHets] 9 May 1948 [Flitwick Plantation, Bedfordshire. EMM86:6-8] 10 May 1952 [Grounds of Pest Infestation Laboratory, Slough. LondonHets] 7 May 1945 [Grounds of Reading University, Berkshire. Adults *in copula*. EMM81:275] 8 May 1991 [Nunhead Cemetery. BJENH4:180] 8 May 1945 [St Patrick's Hall, Reading, Berkshire. Adults *in copula*. EMM81:275]
- 05C: 13 May 1950 [Epping Forest, Essex. LondonHets] 12 May 1977 [Polbream Cliffs, Polpeor, Cornwall. CornwallHets]
- 05D: 16 May 1998 [Nonsuch Park, Cheam, Surrey. Mating pairs of cream and red spotted forms. BJENH13:246-247] 19 May 1940 [Rotherfield Peppard, Oxon. EMM77:101-104] 16 May 2015 [Sherborne Water Meadows, Gloucestershire. HN23:10] 16 May 2015 [Windrush Airfield, Gloucestershire. HN23:10] 17 May 1992 [Woolwich Common, West Kent. Adults. ERJV106:30] 19 May 1999 [Woolwich Common, West Kent. ERJV111:204]
- 05E: 25 May 1951 [Ash Vale, Hampshire. Male. EG12:77-79] 23 May 1992 [Bookham Common, Surrey. BJENH7:175] 21 May 1951 [Grounds of the Pest Infestation Laboratory, Slough. LondonHets] 21 May 1951 [Grounds of the Pest Infestation Laboratory, Slough. Adults of white, yellow, orange and red forms. EG3:34-38] 21 May 1948 [Hertford Heath, near Hertford. EMM84:264] 23 May 2004 [Kennack Sands, Cornwall. CornwallHets]
- 05F: 31 May 1951 [Black Hills, Esher Common, Surrey. LondonHets] 29 May 2005 [Lizard Lighthouse, Cornwall. CornwallHets] 27 May 2005 [Near Sandy, Bedfordshire. HN5:7]
- 06A: 4 June 1951 [Black Hills, Esher Common, Surrey. LondonHets] 3 June 1951 [Booker, near High Wycombe, Buckinghamshire. EMM87:236] 5 June 2007 [Bristol Downs, Bristol, VC34. HN11:11] 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. Adults. EG3:34-38] 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236]
- 06B: 7 June 2005 [Boscombe area, VC11. ERJV117:221-227] 8 June 1996 [Burnham Beeches, Buckinghamshire. BJENH10:122] 10 June 1996 [Gargoyle Wharf, Wandsworth, Surrey. Red form. BJENH10:177] 7 June 2000 [Lower Predannack Cliff, Cornwall. CornwallHets] 7 June 2004 [Wickham Common, Hampshire. Red form. BJENH18:208]
- 06C: 15 June 1992 [Ashtead Common, Surrey. BJENH7:175] 11 June 1951 [Black Hills, Esher Common, Surrey. LondonHets] 12 June 1983 [Poltesco Cove, Cornwall. CornwallHets]
- 06D: 20 June 1992 [Bookham Common, Surrey. BJENH5:177-178]
- 06E: 21 June 2001 [Mullion Cliffs, Cornwall. CornwallHets]
- 06F: 27 June 2011 [Bustard Vedette, VC8. Hem3:103] 29 June 1902 [Faversham, East Kent. EMM38:182] 30 June 1963 [Weybridge, Surrey. LondonHets]
- 07A: 4 July 1951 [Brentford Docks, Middlesex. Adult. LondonHets] 2 July 1951 [Grounds of the Pest Infestation Laboratory, Slough. Adults. EG3:34-38] 2 July 1951 [Grounds of the Pest Infestation Laboratory, Slough. Nymphs. EG3:34-38]
- 07B: 10 July 1996 [Chinbrook Orchard, Grove Park, Bromley, Kent. White/yellow form. BJENH10:177]
- 07C: 13 July 1946 [Bickley, Kent. EMM83:61] 14 July 1951 [Grounds of the Pest Infestation Laboratory, Slough. Adults. EG3:34-38] 14 July 1953 [Hounslow Heath, Middlesex. Adult and nymphs. Ent87:15-18]
- 07D: 16 July 2006 [Severn Tunnel Junction, VC35. HN22:5] 19 July 2004 [Whiteley, Hampshire. Nymphs reared in culture. BJENH18:208]
- 07E: 23 July 2006 [Magdalen North Down, VC12. Hem3:103]
- 07F: 30 July 1951 [Grounds of the Pest Infestation Laboratory, Slough. Adult and nymphs. EG3:34-38] 26 July 1953 [Hounslow Heath, Middlesex. Adult and nymphs. EMM89:303] 31 July 2009 [Near Alderton, Gloucestershire. Nymph. HN16:12]
- 08A: 1 August 2002 [Kennack Sands, Cornwall. CornwallHets]

- 08C: 15 August 2015 [South Norwood Country Park, London. BJENH29:122-125]
- 08D: 18 August 1993 [Alongside the River Thames, near Greenwich, West Kent. Adult and nymph. ERJV106:30] 18 August 1947 [Kimmeridge, near Swanage, Dorset. EMM83:289]
- 09A: 2 September 1950 [Esher Common, Surrey. LondonHets] 3 September 1950 [Esher Common, Surrey. LondonHets] 1 September 1940 [Rotherfield Peppard, Oxon. Adult and nymphs. EMM77:101-104] 2 September 2005 [The Moors, Colchester, Essex. HN6:8]
- 09B: 10 September 1950 [Ash Vale, Surrey. LondonHets] 10 September 1956 [Common Wood, near Amersham, Buckinghamshire. LondonHets] 10 September 2001 [Kites Croft, South Hampshire. BJENH15:180] 6 September 1922 [Sandwich, Kent. Male. EG12:77-79] 8 September 1991 [Woolwich Common, West Kent. Nymphs reared in culture. ERJV104:79-80]
- 09C: 15 September 1992 [Cadgwith, Cornwall. CornwallHets] 12 September 1996 [Polesden Lacey Estate, Surrey. BJENH10:176] 11 September 1991 [Woolwich Common, West Kent. Nymphs. ERJV104:79-80]
- 09E: 24 September 1992 [Kennack Sands, Cornwall. CornwallHets] 24 September 2014 [Newport Steelworks, VC35. Adult and nymph. HN22:5]
- 09F: 27 September 2015 [Spa Common, VC27. Hem4:40]

## Eurydema ornata (Linnaeus) (Pentatomidae)

- 04C: 14 April 2007 [Above Portman Ravine, Boscome, VC11. HN9:13]
- 04D: 17 April 2005 [Solom's Great Wood, Woodmansterne, Surrey. BJENH19:190]
- 04E: 25 April 2004 [Gordon's Steps, Boscombe, VC11. ERJV117:221-227]
- 05C: 15 May 2007 [Steyning, Sussex. HN23:8]
- 05E: 23 May 2006 [Boscombe Chine, VC11. Hem3:103]
- 06B: 7 June 2005 [Above Portman Ravine, Boscombe, VC11. Male. ERJV117:221-227]
- 08F: 28 August 2015 [Seaforth Head, VC13. Adult. HN23:5]
- 10C: 12 October 2006 [Near Usk, Monmouthshire. EMM144:163-176] 13 October 2003 [Peacehaven, East Sussex. BJENH19:190]
- 10D: 20 October 2006 [Between Bonchurch and Ventnor, south coast of Isle of Wight. Including a teneral. ERJV118:279]

## Eysarcoris aeneus (Scopoli) (Pentatomidae)

- 05D: 16 May 1948 [Baker's Wood, Heath and Reach, Bedfordshire. EMM86:6-8]
- 06A: 3 June 1934 [New Forest. EMM71:113-114]
- 06B: 8 June 1931 [Brookwood, Surrey. LondonHets]
- 06E: 25 June 2011 [Hawkhill Inclosure, near Brockenhurst, New Forest. Adult. Hem1:26] 25 June 2011 [Hawkhill Inclosure, near Brockenhurst, New Forest. Adults. Hem1:26]
- 07E: 23 July 1950 [New Forest. Adult and nymphs. EMM87:172-173]
- 07F: 27 July 1984 [Brockenhurst, Hampshire. PTBENHS18:20]
- 08D: 16 August 2010 [Hawkhill Inclosure, near Brockenhurst, New Forest. Adults. Hem1:26]
- 08E: 25 August 1984 [New Forest, Hampshire. PTBENHS18:20]
- 09B: 10 September 1934 [New Forest. EMM71:113-114] 10 September 1907 [Parkhurst Forest, Isle of Wight. HantsHets]

#### Evsarcoris venustissimus (Schrank) (Pentatomidae)

- 01D: 20 January 2009 [Lincoln, VC53. Hem3:83]
- 02B: 6 February 1945 [Puddlehill, Houghton Regis, Bedfordshire. EMM81:183-185]
- 04C: 14 April 1951 [Grounds of the Pest Infestation Laboratory, Slough. Adult. EMM87:201]
- 04E: 21 April 1953 [Grounds of the Rothamsted Experimental Station, Harpenden, Hertfordshire. PTSLENHS1953-54:4]
- 05A: 5 May 1980 [Maidenhead, Berkshire, EMM116:132]
- 05C: 12 May 1951 [Grounds of the Pest Infestation Laboratory, Slough. Adults. EMM87:201]
- 05D: 19 May 1981 [Charlton, SE7. EMM119:62] 18 May 2019 [Colne Fen, VC31. Hem6:270] 18 May 1946 [Croydon, Surrey. LondonHets] 20 May 2009 [Goole river at Tickhill, VC63. Adults. HN15:11]

- 05E: 22 May 1955 [Banstead Downs, Surrey. Adults. LondonHets] 23 May 1984 [Blackstable Wood, Gloucestershire. GloucsHets] 21 May 1945 [Croydon, Surrey. LondonHets] 23 May [Dinton Pastures Country Park, Berkshire. BJENH7:118-126] 22 May 1953 [Epping Forest, Essex. LondonHets] 24 May 1953 [Gerrards Cross, Buckinghamshire. LondonHets] 25 May 1902 [Greenhithe, Kent. LondonHets] 24 May 1959 [Whippendell Wood, Hertfordshire. PTSLENHS1959:78-79]
- 05F: 26 May 1952 [Arbrook Common, Surrey. LondonHets] 31 May 1993 [Chedworth Woods, Gloucestershire. GloucsHets] 27 May 2000 [Chesterfield Canal, VC63. HN7:15] 27 May 1950 [Church Woods, Blean, Kent. EMM86:224] 30 May 1992 [Cutsdean Quarry, Gloucestershire. GloucsHets] 29 May 2011 [Fancott Meadows NR, Bedfordshire. Adult. HN17/18:7] 28 May 1936 [Harpenden, Hertfordshire. LondonHets] 27 May 2005 [Near Sandy, Bedfordshire. HN5:7] 29 May 1949 [North Weald, Essex. Adults, some *in copula*. EMM85:253] 29 May 1950 [Reigate district, Surrey. Including some paired. PTSLENHS1951-52:126-130] 31 May 1950 [Reigate district, Surrey. PTSLENHS1951-52:126-130] 26 May 1951 [Reigate, Surrey. LondonHets]
- 06A: 4 June 1960 [Eashing, Surrey. PTSLENHS1960:82-83] 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236] 5 June 1993 [Hailey Wood, Gloucestershire. GloucsHets] 4 June 1980 [Maidenhead, Berkshire. Breeding pairs. EMM116:132] 4 June 1950 [Reigate district, Surrey. Eggs. PTSLENHS1951-52:126-130] 1 June 1946 [Ringwood, Hampshire. Females. EMM83:59-61] 3 June 1946 [Slough, Buckinghamshire. Males and females, one pair *in copula*. EMM85:193-206] 4 June 1985 [Standish Wood, Gloucestershire. GloucsHets] 5 June 1960 [Whippendell Wood, near Watford, Hertfordshire. Including eggs. EMM97:27-291
- 06B: 6 June 1926 [Box Hill, Surrey. Including eggs and males and females *in copula*. EMM62:161-162] 7 June 1946 [Boxmoor, Hertfordshire. EMM85:79] 6 June 1903 [Horsley, Surrey. Including male and female *in copula*. EMM62:161-162] 9 June 1970 [Stone, near Dartford, Kent. LondonHets] 9-10 June 1984 [Wanstead Park, East London. PTBENHS17:88-89]
- 06C: 14 June 1960 [Bishop's Wood, Batchworth, Hertfordshire. LondonHets] 13-14 June 1981 [Blean Woods, Kent. PTBENHS15:31-32] 12 June 1948 [Boxmoor, Hertfordshire. Adults, some *in copula*. EMM85:79] 11 June 2005 [Cabilla Wood, Cornwall. CornwallHets] 12 June 2005 [Coombe Valley, Cornwall. CornwallHets] 13 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. Adults and eggs. EMM87:216] 13 June 1951 [Reigate, Surrey. Adults and eggs. Ent84:192] 14 June 2006 [Station Pond, Bodmin, Cornwall. CornwallHets] 12 June 2005 [Stowe Wood, Cornwall. CornwallHets] 12 June 1993 [Tattershall, VC54. Hem3:83] 13 June 1960 [Whippendell Wood, Hertfordshire. LondonHets]
- 06D: 16 June 1951 [Arbrook Common, Surrey. LondonHets] 17 June 1945 [Croydon, Surrey. LondonHets] 20 June 1924 [Harpenden, Hertfordshire. LondonHets] 19 June 1983 [Oakley Wood, Gloucestershire. GloucsHets] 17 June 1950 [Ockham Common, Surrey. LondonHets] 18 June 1950 [Ockham Common, Surrey. LondonHets] 18 June 1950 [Reigate district, Surrey. Nymphs. PTSLENHS1951-52:126-130] 18 June 1946 [Salisbury, Wiltshire. EMM83:175] 16 June 1991 [Temple Ham, Bourton-on-the-Water, Gloucestershire. GloucsHets] 17 June 1951 [Westerham district, Kent. LondonHets]
- 06E: 24 June 1951 [Arbrook Common, Surrey. LondonHets] 23 June 1928 [Boxhill, Surrey. LondonHets] 25 June 1944 [Finchley, Middlesex. LondonHets] 25 June 1977 [Northward Hill NNR, Kent. PTBENHS11:67-68] 25 June 1955 [Wimbledon Common, Surrey. LondonHets]
- 06F: 26 June 1977 [Dartford Heath, Kent. LondonHets] 30 June 1985 [Oakley Wood, Gloucestershire. GloucsHets] 26 June 1960 [Radlett, Hertfordshire. LondonHets]
- 07A: 5 July 1957 [Banstead Downs, Surrey. Nymphs. LondonHets] 2 July 1977 [Dagnam Park, Essex. LondonHets] 4 July 1954 [Happy Valley, Coulsdon, Surrey. LondonHets]
- 07B: 7 July 1900 [East Horsley, Surrey. LondonHets] 8 July 1936 [Hillingdon, Middlesex. Nymphs. LondonHets] 9 July 1899 [Ranmore Common, Surrey. LondonHets] 9 July 1905 [Wisley, Surrey. LondonHets]
- 07C: 15 July 1984 [Cirencester Park, Gloucestershire. GloucsHets] 13 July 1954 [Grounds of Rothamsted Experimental Station, Harpenden. LondonHets] 15 July 1954 [Grounds of

- Rothamsted Experimental Station, Harpenden. LondonHets] 15 July 1950 [Reigate district, Surrey. Including some *in copula*. PTSLENHS1951-52:126-130]
- 07D: 20 July 1947 [Osterley, Middlesex. LondonHets]
- 07E: 22 July 1949 [Effingham, Surrey. LondonHets] 23 July 1950 [Reigate district, Surrey. PTSLENHS1951-52:126-130]
- 07F: 27 July 1903 [Horsley, Surrey. LondonHets] 27 July 2006 [St Kew Highway, Cornwall. CornwallHets]
- 08B: 10 August 1976 [Darenth Wood, Kent. LondonHets] 10 August 1985 [Edgeworth area, Gloucestershire. GloucsHets] 8 August 1936 [Hillingdon, Middlesex. Nymphs reared in culture. Ent71:148-153] 8 August 1953 [Hounslow Heath, Middlesex. Nymphs. Ent87:15-18]
- 08C: 13 August 1961 [Bookham Common, Surrey. Nymphs. LondonHets] 15 August 1982 [Bridport, Dorset. PTBENHS18:20] 11 August 1950 [Reigate district, Surrey. PTSLENHS1951-52:126-130] 15 August 2015 [South Norwood Country Park, London. BJENH29:122-125]
- 08D: 16 August 2013 [Catholme, near Barton-under-Needwood, VC39. Hem3:92] 16 August 1936 [Hillingdon, Middlesex. Adults. LondonHets] 16 August 1984 [Limmo Peninsula, VC18. Adults and nymphs. EMM127:38] 20 August 1989 [Sandhurst NR, Gloucestershire. GloucsHets]
- 08E: 22 August 1964 [Kirkaldy, Brook, Kent. PTSLENHS1965:83] 21 August 2005 [Shropshire Union Canal at Minshull Vernon, VC58. HN6:14]
- 08F: 27 August 1950 [Boxhill, Surrey. LondonHets] 26 August 1952 [East Bergholt, Suffolk. Adults. EMM90:81-82] 29 August 2017 [The Wolds, near Market Weighton, VC61. Hem5:38]
- 09A: 2 September 1951 [Amersham, Buckinghamshire. Nymph. LondonHets] 2 September 1948 [Boxmoor, Hertfordshire. Nymphs. EMM85:79] 5 September 1948 [Near Halstead, North Essex. EMM86:298] 1 September 1940 [Rotherfield Peppard, Oxon. EMM77:101-104]
- 09B: 10 September 1994 [Lower Oddington Ashes, Gloucestershire. GloucsHets] 8 September 1991 [Whelford Pools, Gloucestershire. GloucsHets]
- 09C: 12 September 1950 [Near Gravesend, Kent. LondonHets] 12 September 2013 [Snettisham, Carrstone Pit, VC28. Hem3:92]
- 09D: 20 September 1952 [Amersham, Buckinghamshire. Adult. LondonHets] 18 September 1976 [Dagnam Park, Essex. LondonHets] 17 September 1994 [Sherborne Farm, Gloucestershire. GloucsHets]
- 09E: 23 September 1944 [Puddlehill, Houghton Regis, Bedfordshire. EMM81:183-185] 21 September 1951 [West Wickham, Kent. LondonHets]
- 09F: 29 September 2004 [Bodmin Gaol, Cornwall. CornwallHets]
- 10F: 31 October 1944 [Puddlehill, Houghton Regis, Bedfordshire. Adults and nymph. EMM81:183-185]

# Mecidea lindbergi Wagner (Pentatomidae)

- 07D: 16 July 2015 [Weymouth, Dorset. BJENH30:100]
- 12D: 18 December 2015 [Fareham, VC11. Atropos56:23-25] 19 December 2015 [Portchester, VC11. Atropos56:23-25] 16 December 2015 [Weymouth, VC9. Adult. Atropos56:23-25] 19 December 2015 [Weymouth, VC9. Atropos56:23-25]
- 12F: 27 December 2015 [Exeter, VC3. Atropos56:23-25] 30 December 2015 [Exeter, VC3. Atropos56:23-25] 26 December 2015 [Fareham, VC11. Atropos56:23-25] 27 December 2015 [Walditch, VC9. Atropos56:23-25]

# Neottiglossa pusilla (Gmelin) (Pentatomidae)

- 03E: 23 March 1945 [Limpsfield, Surrey. LondonHets]
- 04D: 16 April 2014 [Hugglescote, VC55. Hem3:92]
- 05F: 27 May 1920 [Camberley, Surrey. LondonHets] 26 May 1957 [Chorley Wood, Hertfordshire. LondonHets] 26 May 2006 [Crayford Stadium Rough, West Kent. BJENH20:193-194]
- 06A: 3 June 1934 [New Forest. EMM71:113-114]
- 06B: 9 June 1963 [Challock, Kent. PTSLENHS1963Part1:67] 7 June 2015 [Crabtree Hill, Forest of Dean, Gloucestershire. HN23:10] 7 June 1996 [Hither Green NR, Kent. BJENH10:177] 6

- June 1996 [Kenley Common, Surrey. BJENH10:176-177] 6 June 1906 [Leighton Buzzard, Bedfordshire. Female. EMM93:49-51] 8 June 1963 [Swanscombe, Kent. LondonHets] 8 June 2015 [Winterton North Dunes, VC27. Hem4:40]
- 06C: 14 June 1953 [Bookham Common, Surrey. Female. LondonHets] 11 June 1996 [Rauceby Warren LWT Reserve, VC53. Hem3:83] 13 June 1952 [Salcey Forest, Northamptonshire. Males and females. EMM93:49-51]
- 06D: 20 June 2019 [Between Santon Warren and Two Mile Bottom, West Norfolk. Hem6:248] 19 June 1915 [Byfleet, Surrey. Nymphs. Butler1923] 16 June 1983 [Croxton, VC28. Hem4:18] 17 June 1892 [Eynsford, Kent. LondonHets] 19 June 2019 [Knettishall Heath Country Park, West Suffolk. Hem6:247] 18 June 2019 [Rampart Field, near Lackford, West Suffolk. Hem6:247] 19 June 1983 [Santon Warren, VC28. Hem4:18] 17 June 2019 [Two Mile Bottom, West Norfolk. Hem6:247]
- 06E: 21 June 2019 [Near Thetford, West Norfolk. Hem6:248] 21 June 2019 [Near Two Mile Bottom, West Norfolk. Hem6:248]
- 06F: 28 June 2006 [Dunmere Wood, Cornwall. CornwallHets] 27 June 1996 [Hither Green NR, Kent. BJENH10:177]
- 07A: 2 July 1950 [Brockenhurst. *In copula*. PTSLENHS1950-51:71-72] 2 July 1960 [Oxshott, Surrey. LondonHets]
- 07B: 8 July 1935 [West Hyde, Hertfordshire. LondonHets]
- 07C: 12 July 1922 [Hengistbury Head, Hampshire. EMM58:231] 15 July 2015 [Llandrindod Wells, VC43. Adult. HN23:4] 12 July 1952 [Oxshott Heath and Esher Common. PTSLENHS1952-53:83-84] 12 July 1989 [Pencannow Point, Crackington Haven, Cornwall. CornwallHets]
- 07D: 20 July 1950 [Wilton, Wiltshire. EMM88:45]
- 07E: 24 July 1954 [Burnham Beeches, Buckinghamshire. LondonHets]
- 08B: 10 August 1933 [Harefield, Middlesex. Nymphs reared in culture. Ent71:148-153] 7 August 1893 [Near Maidenhead. Butler1923]
- 08C: 15 August 1899 [Albury, Surrey. Butler1923] 15 August 1933 [Harefield, Middlesex. Adults. LondonHets]
- 08D: 16 August 1973 [Moor Farm LWT Reserve, VC54. Hem3:83]
- 08E: 22 August 1996 [Hither Green NR, Kent. BJENH10:177]
- 08F: 26 August 2005 [Baddesley Common, Warwickshire. HN7:11] 26 August 1949 [Reigate, Surrey. EMM87:139] 27 August 2004 [Wath, Rotherham, VC63. HN7:15]
- 09A: 1 September 2004 [River Medway, Rochester. BJENH18:209] 2 September 1906 [Wisley, Surrey. LondonHets]
- 09B: 9 September 1915 [Barton Mills, Suffolk. SuffolkHetsAnn] 8 September 1934 [Harefield, Middlesex. Female. LondonHets] 6 September 2001 [Lemar, Cornwall CornwallHets] 6 September [Near Codicot. Ent28:312]
- 09C: 12 September 1934 [Harefield, Middlesex. Male. LondonHets] 11 September 1985 [Stowe Wood, Cornwall. CornwallHets]
- 09F: 29 September 1892 [Chobham, Surrey. LondonHets]
- 10C: 14 October 2001 [Mount Field, Cornwall. CornwallHets]
- 10F: 29 October 2015 [Paradys Wen, Gwernargllwydd, VC43. Adult. HN23:4]

#### Nezara viridula (Linnaeus) (Pentatomidae)

- 08C: 12 August 2008 [Near Stanford-le-Hope, VC18. Nymph. HN12:16]
- 08D: 20 August 2009 [Staines, VC21. Nymphs. HN14:9]
- 08E: 23 August 2003 [Kingswood Avenue, Queens Park, London, VC21. Nymphs, maturing after capture. ERJV116:55-58] 23 August 2008 [Near Stanford-le-Hope, VC18. Nymphs reared in culture. HN12:16] 25 August 2007 [Staines, Middlesex. Nymphs. HN12:17]
- 09A: 1 September 2007 [Staines, Middlesex. Nymph. HN12:17]
- 09B: 9 September 2005 [Isleworth, Middlesex. Adult and nymphs. BJENH19:190] 8 September 2008 [Near Stanford-le-Hope, VC18. Nymph. HN12:16] 10 September 2014 [Spellbrook, VC20. Adult. HN22:5] 8 September 2008 [Staines, Middlesex. Nymphs. HN12:17]

- 09E: 22 September 2003 [Camley Street Natural Park, near King's Cross Station, London. Nymphs. BJENH17:143-146] 24 September 2014 [Maple Lodge NR, Maple Cross, VC20. Nymphs. HN22:5] 22 September 2011 [Warwick Gardens, Peckham Rye, VC17. Adults. HN17/18:5]
- 09F: 27 September 2003 [Camley Street Natural Park, near King's Cross Station, London. Nymphs reared in culture. BJENH17:143-146]
- 10E: 21 October 2003 [Stratford, VC18. Nymph. HN12:16]

## Palomena prasina (Linnaeus) (Pentatomidae)

- 02A: 3 February 2006 [Carn Entral Farm, Brea, Cornwall. CornwallHets]
- 02C: 13 February 2001 [England. Brown form. BJENH14:232]
- 03F: 26 March 2003 [Warwickshire. HN7:11]
- 04A: 2 April 1949 [Effingham district, Surrey. Dark winter form. LondonHets]
- 04C: 11 April 1926 [Ballyhenry, Co Wicklow. IrelandHets]
- 04D: 19 April 2007 [Burford, VC23. HN9:13]
- 04F: 28 April 1893 [Bagley Wood, near Oxford, VC22. EMM29:191-192]
- 05A: 4 May 1952 [Bookham Common, Surrey. Adults. LondonHets] 5 May 2005 [Crooks Peak, near Cheddar, VC6. HN5:6] 5 May 1951 [Oxshott, Surrey. LondonHets]
- 05B: 9 May 1965 [Farningham Wood, Kent. PTSLENHS1965:86-87] 7 May 1979 [West Humble, Surrey. LondonHets]
- 05C: 12 May 1951 [Ashtead Woods, Surrey. LondonHets] 15 May 1948 [Ashtead, Surrey. LondonHets] 13 May 1951 [Banstead Wood, Surrey. LondonHets] 14 May 1894 [Headley, Surrey. LondonHets] 13 May 1933 [Mickleham, Surrey. LondonHets] 11 May 1950 [Trawscoed, Cardiganshire. Female. EMM92:54-64]
- 05D: 16 May 1954 [Daneway, Gloucestershire. EMM91:264] 18 May 1958 [Horsley, Surrey. LondonHets] 18 May 1991 [Midger Wood, Gloucestershire. GloucsHets] 17 May 2004 [Thrybergh Country Park, VC63. HN7:15]
- 05E: 21 May 1934 [Kilcarry, Co Carlow. IrelandHets] 21-24 May 2007 [Mary Knoll Valley, Herefordshire. BJENH21:187-192] 25 May 1907 [Torquay. Dark olive form. Ent48:173]
- 05F: 27 May 1950 [Church Woods, Blean, Kent. EMM86:224] 29 May 2011 [Fancott Meadows NR, Bedfordshire. Adult. HN17/18:7] 30 May 1954 [Gogerddan, Cardiganshire. EMM92:54-64] 29 May 1898 [Mickleham, Surrey. LondonHets] 29 May 1993 [Sapperton Common and Siccaridge Wood, Gloucestershire. GloucsHets]
- 06A: 5 June 1938 [High Wycombe, Buckinghamshire. LondonHets] 1 June 1991 [Littledean Walk, Gloucestershire. GloucsHets] 5 June 1897 [Mickleham, Surrey. LondonHets] 2 June 1991 [Swifts Hill, Gloucestershire. GloucsHets] 3 June 1950 [Trawscoed, Cardiganshire. Male and females. EMM92:54-64]
- 06B: 7 June 1932 [Sherwood Forest. EMM68:213-214] 8 June 1963 [Swanscombe, Kent. LondonHets]
- 06C: 15 June 2015 [The Chase, Broad Layings, VC12. Hem3:53] 14 June 1950 [Trawscoed, Cardiganshire. Male and female *in copula*. EMM92:54-64]
- 06D: 16 June 1983 [Freshwater, Isle of Wight. BJENH6:77] 20 June 1953 [Riddlesdown, Surrey. Adult. LondonHets] 17 June 1951 [Westerham district, Kent. LondonHets]
- 06E: 21 June 1951 [Culbin sand-hills, Moray Firth. Adult. EMM87:255] 24 June 1944 [Fiddler's Elbow, Monmouthshire. EMM91:143] 21 June 2015 [Kent. Adult. BJENH29:35-36] 25 June 1932 [Potter Hanworth, Lincolnshire. EMM68:213-214] 25 June 2012 [Wednesbury/West Bromwich, VC39. Hem3:92]
- 06F: 29 June 1940 [Boxhill, Surrey. LondonHets] 30 June 1985 [Hailey Wood, Gloucestershire. GloucsHets] 30 June 1951 [Oxshott. PTSLENHS1951-52:73-74]
- 07A: 2 July 1950 [Brockenhurst. PTSLENHS1950-51:71-72] 2 July 2001 [Logan Rock, Treen, Cornwall. CornwallHets] 4 July 2015 [Sandy Point, Hayling Island, Hampshire. BJENH29:56-59] 5 July 1944 [Starcross, South Devon. Ent88:89-91]
- 07B: 9 July 1953 [Bookham Common, Surrey. LondonHets] 8 July 1949 [Boxhill, Surrey. LondonHets] 8 July 2007 [Wokingham, Berkshire. Nymph. BJENH26:145-147]

- 07C: 13 July 2001 [Cadsonbury Woods, Cornwall. CornwallHets] 11 July [Cornwall. Adult pairs. ERJV42:49-51]
- 07D: 19 July 1952 [Norbury Park, Surrey. Nymph. LondonHets]
- 08A: 1 August 1953 [Riddlesdown, Surrey. Nymph. LondonHets]
- 08B: 8 August 2001 [Along the Mineral Line at Baddesley Ensor, Warwickshire. HN7:11] 10 August 1985 [Edgeworth area, Gloucestershire. GloucsHets] 7 August 1967 [Long Ashton Research Station, Bristol. Nymphs. Ent101:202-204] 8 August 2005 [Shapwick, Somerset, VC6. Nymph reared in culture. HN6:14]
- 08C: 15 August 1953 [Bookham Common, Surrey. Nymphs. LondonHets] 11 August 2012 [Narborough, VC55. Hem3:92] 15 August 1993 [Sedbury, Gloucestershire. GloucsHets] 15 August 2015 [South Norwood Country Park, London. BJENH29:122-125]
- 08D: 16 August 1953 [Bookham Common, Surrey. Nymph. LondonHets] 19 August 1985 [Cinderford, Gloucestershire. GloucsHets] 17 August 1991 [Freshwater, Isle of Wight. BJENH6:77] 17 August 1951 [Grounds of the Pest Infestation Laboratory, Slough. Nymphs. EMM87:274] 16 August 1967 [Long Ashton Research Station, Bristol. Nymph. Ent101:202-204] 18 August 2015 [Royal Leamington Spa Cemetery, Warwickshire. Nymphs reared in culture. Hem3:126] 18 August 2007 [Templenoe, Co Kerry. Nymph. HN10:13]
- 08E: 23 August 1999 [Grimsthorpe Park, VC53. Hem3:83] 25 August 1962 [Trottiscliffe, Kent. PTSLENHS1962:99-100]
- 08F: 27 August 1955 [Bookham Common, Surrey. Nymph. LondonHets] 27 August 1937 [Boxhill. PTSLENHS1937-38:51] 27 August 1950 [Boxhill. PTSLENHS1950-51:77-78] 28 August 1937 [Boxhill, Surrey. LondonHets] 29 August 1896 [Boxhill, Surrey. LondonHets] 31 August 1898 [Boxhill, Surrey. LondonHets] 29 August 1994 [Dowdeswell Wood, Gloucestershire. GloucsHets] 27 August 1932 [Houghton, Sussex. Nymph. EMM69:21] 27 August 1951 [Hoyle's Mouth, Penally, Pembrokeshire. EMM88:22] 30 August 1947 [Orpington, Kent. LondonHets] 27 August 2006 [Wintringham, VC61. Nymphs. HN9:15] 26 August 1949 [Woking, Surrey. LondonHets]
- 09A: 4 September 1949 [Ash Vale, Surrey. Autumn form. PTSLENHS1949-50:78] 3 September 1993 [Beachley Point, Gloucestershire. GloucsHets] 2 September 1950 [Esher Common, Surrey. LondonHets] 5 September 1945 [Messack, St Just-in-Roseland, Cornwall. Adult. EMM82:42] 3 September 1988 [Near Brough Beech, Kent. Nymphs reared in culture. BJENH1:185] 4 September 2004 [Pershore, Worcestershire. Nymph. EMM142:52]
- 09B: 8 September 1956 [Great Bookham, Surrey. Nymph. LondonHets] 10 September 1994 [Lower Oddington Ashes, Gloucestershire. GloucsHets] 9 September 1944 [Mounton, Chepstow, Monmouthshire. EMM91:143] 10 September 1934 [New Forest. EMM71:113-114] 9 September 1980 [Sapperton Valley, Gloucestershire. GloucsHets]
- 09C: 14 September 1947 [Ashtead Woods, Surrey. LondonHets] 11 September 1966 [Ham Street, Kent. Adults and nymphs. PTSLENHS1967:24-26] 13 September 2019 [Lund Ridge, North York Moors, North-east Yorkshire. Hem6:266] 14 September 1991 [Nagshead, Gloucestershire. GloucsHets] 12 September 1944 [Ranmore Common, Surrey. LondonHets] 14 September 1996 [Tredinnickpits, Cornwall. CornwallHets]
- 09D: 19 September 1947 [Mickleham Downs, Surrey. LondonHets] 18 September 1993 [Midger Wood, Gloucestershire. GloucsHets] 18 September 1955 [Otford, Kent. LondonHets] 17 September 1994 [Sherborne Farm, Gloucestershire. GloucsHets]
- 09E: 23 September 1951 [Farningham Woods, Kent. PTSLENHS1951-52:81] 23 September 1934 [Ovoca, Co Wicklow. IrelandHets] 22 September 1960 [Roughan Crag, Kilnaboy, Co Clare. Male. EG12:77-79] 22 September 1990 [Tetbury, Gloucestershire. GloucsHets]
- 09F: 30 September 2007 [Above Elmley Castle on slopes of Bredon Hill, VC37. HN10:11] 26 September 1955 [Bookham Common, Surrey. Nymph. LondonHets] 27 September 1954 [Fawkham, Kent. LondonHets] 28 September 2001 [Warwickshire. HN7:11]
- 10A: 5 October 1947 [Ashtead, Surrey. LondonHets] 4 October 1953 [Bookham Common, Surrey. LondonHets] 5 October 1982 [Freshwater, Isle of Wight. BJENH6:77] 2 October 1955 [Mickleham Downs, Surrey. Female. LondonHets] 1 October 1964 [Oxwich, Glamorganshire. PTSLENHS1965:83] 5 October 1950 [West End Common, Surrey. LondonHets] 1 October 1950 [Winterslow, Wiltshire. EMM88:45]

- 10B: 7 October 1952 [Esher Common, Surrey. LondonHets] 7 October 1956 [Mickleham, Surrey. LondonHets] 9 October 1994 [Woodchester Park, Gloucestershire. GloucsHets]
- 10C: 14 October 1956 [Bookham Common, Surrey. LondonHets] 13 October 1991 [Freshwater, Isle of Wight. BJENH6:77] 15 October 1950 [Ranmore Common, Surrey. LondonHets]
- 10D: 18 October 1997 [Burnham Beeches, Buckinghamshire. BJENH13:244-245] 16 October 1954 [Combley Great Wood, Isle of Wight. Male. EG12:77-79] 17 October 1992 [Little Comberton. HSGN12:10] 19 October 1947 [Mickleham. PTSLENHS1947-48:72-73] 20 October 1940 [Near Ipsden, Oxfordshire. EMM77:101-104]
- 10F: 31 October 1993 [Rowney Warren, Shefford, Bedfordshire. Brown winter form. EMM131:159-161]
- 11B: 9 November 1983 [Freshwater, Isle of Wight. BJENH6:77] 9 November 2005 [Warwickshire. Nymph. HN7:11]
- 11D: 18 November 1950 [Amersham, Buckinghamshire. LondonHets]
- 11E: 21 November 2005 [Warwickshire. Adult. HN7:11]
- 11F: 28 November 1979 [Rhandirmwyn, near Llandovery, Dyfed. Brown winter form. EMM131:159-161]

# Pentatoma rufipes (Linnaeus) (Pentatomidae)

- 01C: 11 January 2010 [Wick, Worcestershire. Nymphs. EMM146:62]
- 01D: 19 January 1952 [Barnwood, Gloucestershire. GloucsHets]
- 03A: 4 March 1943 [Cotswold Park, Gloucestershire. GloucsHets] 2 March 1988 [Dole Wood, VC53. Hem3:84]
- 04B: 9 April 1945 [Fancott, Bedfordshire. Adults. EMM81:111] 9 April 1955 [Penparcau, Cardiganshire. Nymphs. EMM92:54-64]
- 05C: 12 May 1943 [Lydney, Gloucestershire. GloucsHets] 14 May 1932 [Near Exton, Rutland. EMM68:213-214]
- 05D: 19 May 2019 [Five Arches Pit Nature Reserve, VC31. Hem6:270]
- 05F: 29 May 2011 [Fancott Meadows NR, Bedfordshire. Nymph. HN17/18:7]
- 06A: 5 June 1915 [Epping Forest, Essex. Nymph. LondonHets]
- 06C: 12 June 1943 [Boxhill, Surrey. Nymph. LondonHets] 15 June 1912 [Epping Forest. Nymph. EMM48:239-240] 14 June 1942 [Washer's Wood, Bedfordshire. EMM86:6-8]
- 06D: 20 June 1940 [Reading district. Adults and nymphs. EMM77:101-104] 16 June 2006 [Shell Woods, Cornwall. Nymph. CornwallHets]
- 06E: 22 June 1924 [Horsley, Surrey. Nymph. LondonHets]
- 06F: 30 June 1952 [Arbrook Common, Surrey. LondonHets] 30 June 1945 [Ashtead Woods, Surrey. LondonHets] 29 June 1942 [Boxhill, Surrey. LondonHets] 30 June 2016 [University Parks, Oxford, Oxfordshire. Nymphs reared in culture. Hem4:126]
- 07A: 2 July 1950 [Brockenhurst. PTSLENHS1950-51:71-72] 4 July 2016 [Cowleaze Wood, Chiltern Hills, Oxfordshire. Nymphs reared in culture. Hem4:126] 5 July 1967 [Inchcailloch, Loch Lomond NNR, Stirlingshire. EMM114:21-24] 4 July 1970 [Mallard Wood, New Forest, VC11. Hem3:103] 2 July 2015 [New Marston Meadows, Oxford, Oxfordshire. Nymphs reared in culture. Hem3:126] 5 July 1944 [Sewell, near Houghton Regis, Bedfordshire. EMM81:183-185] 5 July 2016 [Wooton, Oxfordshire. Nymphs reared in culture. Hem4:126]
- 07B: 7 July 1948 [Bookham Common, Surrey. LondonHets] 6 July 1942 [Byfleet, Surrey. LondonHets] 8 July 1950 [Byfleet, Surrey. LondonHets] 8 July 1939 [Clandon. PTSLENHS1939-40:43-44] 7 July 2016 [Cothill, VC22. Nymphs reared in culture. Hem4:126] 8 July 1903 [Headley Lane, Surrey. Nymph. LondonHets] 7 July 1922 [Hengistbury Head, Hampshire. Nymphs. EMM58:210-211] 8 July 1953 [Oxshott, Surrey. LondonHets] 8 July 2015 [Stonesfield, Oxfordshire. Nymphs reared in culture. Hem3:126] 8 July 2007 [Wokingham, Berkshire. Nymph. BJENH26:145-147] 10 July 2015 [Yarnton, Oxfordshire. Nymphs reared in culture. Hem3:126]
- 07C: 13 July 1953 [Cannop Ponds, Gloucestershire. GloucsHets] 13 July 1974 [Old Woking, Surrey. PTBENHS7:94] 12 July 1952 [Oxshott, Surrey. LondonHets] 11 July 1896 [Shirley, Surrey. LondonHets]

- 07D: 19 July 1955 [Aberystwyth, Cardiganshire. Female. EMM92:54-64] 18 July 2004 [Bodmin Airfield, Cornwall. CornwallHets] 16 July 1938 [Bookham Common, Surrey. LondonHets] 20 July 2005 [Churchtown Farm, Saltash, Cornwall. CornwallHets] 20 July 1955 [Derwenlas, Montgomeryshire. Female. EMM92:54-64] 20 July 1951 [Grounds of the Pest Infestation Laboratory, Slough. Adult and nymph. EMM87:274] 16 July 1944 [Marsden, Gloucestershire. GloucsHets] 18 July 1946 [Mickleham, Surrey. LondonHets] 18 July 1955 [Penparcau, Cardiganshire. Male, female and nymph. EMM92:54-64] 18 July 1957 [Ranmore Common, Surrey. LondonHets] 20 July 1983 [Santon Warren, VC28. Hem4:18] 16 July 1982 [Stanmore, Middlesex. LondonHets] 17 July 2015 [The Chase, Broad Layings, VC12. Hem3:54] 20 July 1983 [Two Mile Bottom, VC28. Hem4:18]
- 07E: 21 July 1941 [Boxhill, Surrey. LondonHets] 22 July 1943 [Boxhill, Surrey. LondonHets] 21 July 1946 [Byfleet, Surrey. LondonHets] 22 July 2006 [Godolphin Estate, Cornwall. CornwallHets] 24 July 2010 [Near railway station, Botley Road, Oxford. Adult pairs. BJENH29:40] 21 July 1957 [Norbury Park, Surrey. LondonHets] 21 July 1983 [Santon Warren, VC28. Hem4:18]
- 07F: 29 July 1984 [Cannop Brook, Gloucestershire. GloucsHets] 29/30 July 1978 [Denny Bog, New Forest. PTBENHS12:134-135] 31 July 1966 [Inchcailloch, Loch Lomond NNR, Stirlingshire. EMM114:21-24] 29 July 2011 [Near railway station, Botley Road, Oxford. Adult pairs. BJENH29:40] 28 July 1951 [Oxshott, Surrey. LondonHets]
- 08A: 2 August 1967 [Inchcailloch, Loch Lomond NNR, Stirlingshire. EMM114:21-24] 2 August 1954 [Wake Arms, Epping Forest, Essex. LondonHets]
- 08B: 9 August 1980 [Chalk Lane, The King's Forest, VC26. Hem4:18] 7 August 1982 [Monks Wood NNR, Huntingdon, VC31. Hem6:217] 7 August 1944 [Ruislip, Middlesex. LondonHets]
- 08C: 15 August 1946 [Ashtead Woods, Surrey. LondonHets] 12 August 1942 [Bookham Common, Surrey. LondonHets] 15 August 1979 [Two Mile Bottom, VC28. Hem4:18] 12 August 1980 [Warren Wood, VC26. Hem4:18] 13 August 1951 [West End Common, Surrey. LondonHets] 11 August [Wye. Eggs and nymphs. EMM81:86-87]
- 08D: 16 August 1980 [Devil's Punchbowl, VC28. Hem4:18] 20 August 1948 [Woodcock Wood, Fancott, Bedfordshire. EMM86:6-8]
- 08E: 22 August 2006 [Lansallos East Coombe, Cornwall. CornwallHets] 24 August 1917 [New Forest. Eggs. EMM58:152-156] 25 August 2007 [Templenoe, Co Kerry. HN10:13] 22-23 August 1955 [Trawscoed, Cardiganshire. Males. EMM92:54-64]
- 08F: 26 August 1970/28 August 1968 [Caerlaverock NNR, Solway Firth, Dumfriesshire. EMM109:60] 29 August 1945 [Pertenhall Church, Bedfordshire. EMM86:6-8] 29 August 1954 [Scratch Wood, near Elstree, Middlesex. LondonHets]
- 09A: 2 September 1991 [Freshwater, Isle of Wight. BJENH6:77] 1 September 1951 [Gloucester, Gloucestershire. GloucsHets] 5 September 1951 [Grounds of London Zoo, Regents Park, Middlesex. LondonHets] 4 September 1967 [Long Ashton Research Station. Female. EMM109:132-139] 2 September 1954 [Plumstead, Kent. LondonHets] 1 September 1934 [Rickmansworth, Hertfordshire. LondonHets]
- 09B: 8 September 1930 [Bookham Common, Surrey. LondonHets] 8 September 1935 [Byfleet, Surrey. LondonHets] 10 September 2004 [Polridmouth, Cornwall. CornwallHets] 6 September 1923 [Shanklin, Isle of Wight. Nymph. EMM60:117-118]
- 09C: 11 September 1904 [Bookham Common, Surrey. LondonHets] 12 September 1896 [Chesham Park, Buckinghamshire. LondonHets] 15 September 1920 [Putney, Surrey. LondonHets] 14 September 1962 [South Kensington, Middlesex. LondonHets]
- 09D: 19 September 1894 [Churchhill, Lough Neagh. EMM31:33-35] 18 September 1992 [Freshwater, Isle of Wight. BJENH6:77] 18 September 1957 [Monamore Glen, Isle of Arran, Buteshire. EMM94:93]
- 09E: 25 September 1953 [Hackbridge, Surrey. LondonHets] 21 September 1952 [Wimbledon Common, Surrey. LondonHets]
- 09F: 27 September 1983 [Mitcham Common, Surrey. LondonHets] 30 September 1989 [Oakley Wood, Gloucestershire. GloucsHets]
- 10A: 2 October 2008 [Little Comberton, Worcestershire. EMM145:171] 4 October 1950 [Tuffley, Gloucestershire. GloucsHets]

- 10B: 7 October 1900 [Cobham, Surrey. LondonHets]
- 10D: 16 October 1956 [Banstead Downs, Surrey. LondonHets]
- 12D: 18-19 December 2010 [Little Comberton, Worcestershire. Nymph. EMM147:105-110]
- 12F: 30 December 1943 [Marley, Sussex (near Haslemere, Surrey). EMM82:199-200]

# Peribalus strictus (Fabricius) (Pentatomidae)

- 03D: 18 March 2013 [Norwich Road, Wymondham, VC27. Hem4:40]
- 04E: 24 April 2011 [Whippingham, VC10. Adult. HN21:5]
- 05E: 25 May 1901 [Bentley Woods, Suffolk. SuffolkHets] 23 May 1918 [Near Totnes, Devon. Butler1923]
- 05F: 27 May 1950 [Church Woods, Blean, Kent. Female. EMM86:224] 29 May 2007 [Loch's Heath, South Hampshire. Adult male. BJENH20:269]
- 06C: 13 June 2012 [Boscombe Chine, VC11. Adults. HN21:5]
- 06D: 17 June 1899 [Darenth, Kent. EMM88:102]
- 07C: 14 July 2018 [Henfield Common, West Sussex. BJENH32:142]
- 08C: 12 August 1902 [Huntingfield, Faversham, Kent. EMM40:111]
- 09C: 13 September 1899 [Slindon Woods, Sussex. EMM36:132]
- 09D: 19 September 1915 [Near Totnes, Devon. Butler1923]
- 09E: 22 September 2003 [Broomsgrove, Hastings, VC14. Adult. HN4:5]
- 11F: 28 November 1979 [Rhandirmwyn, Carmarthenshire. HSGN3:9]

# Picromerus bidens (Linnaeus) (Pentatomidae)

- 05E: 21 May 1955 [Bookham Common, Surrey. Nymphs. LondonHets]
- 06E: 24 June 1952 [Esher Common, Surrey. Nymph reared in culture. LondonHets]
- 06F: 27 June 1955 [Ruislip NR, Middlesex. Nymphs. LondonHets]
- 07A: 3 July 1954 [Below Devilsden Wood, Coulsdon, Surrey. Nymphs reared in culture. EMM92:65] 4 July 1954 [Devilsden Wood, Coulsdon. Nymphs reared in culture. LondonHets]
- 07C: 12 July 1989 [Morwenstow, Cornwall. CornwallHets] 15 July 1944 [Woodchester Park, Gloucestershire. GloucsHets]
- 07D: 19 July 1964 [Bookham Common, Surrey. LondonHets] 20 July 2015 [Burnt Platt Wood, Oxfordshire Chilterns. BJENH29:43-44] 20 July 2015 [Burnt Platt Wood, Stoke Row, Oxfordshire. Nymphs reared in culture. Hem3:126] 16 July 1940 [Ringwood, Hampshire. Nymph. Ent74:71] 19 July 1999 [Stowe Wood, Cornwall. CornwallHets] 17 July 2015 [The Chase, Broad Layings, Hampshire. Nymphs reared in culture. Hem3:126] 17 July 2015 [The Chase, Broad Layings, VC12. Hem3:54]
- 07E: 23 July 1904 [Byfleet, Surrey. Nymph reared in culture. LondonHets] 24 July 1956 [Ruislip NR, Middlesex, Nymph, LondonHets]
- 07F: 29 July 1950 [Bookham Common, Surrey. LondonHets] 28 July 1986 [Carn Moor, Cornwall. CornwallHets] 29 July 1959 [Oxshott Heath, Surrey. LondonHets] 30 July 1927 [St Margaret's Bay. Nymph. Ent60:235]
- 08A: 3 August 1892 [Byfleet, Surrey. LondonHets] 2 August 1929 [Kilgorman, Co Wexford. IrelandHets] 4 August 1955 [Oxshott Heath, Surrey. LondonHets] 3 August 2006 [Pennywilgie Point, St Minver Highlands, Cornwall. CornwallHets]
- 08B: 8 August 1956 [Chobham, Surrey. Male. EG12:77-79] 8 August 1964 [Dungeness, Kent. PTSLENHS1964:36]
- 08C: 15 August 2006 [Bodmin, Cornwall. CornwallHets] 13 August 1944 [Flitwick Moor, Bedfordshire. EMM81:183-185] 15 August 1933 [Grounds of Imperial College Biological Field Station, Slough. LondonHets] 11 August 1933 [Uxbridge, Middlesex. Ent71:148-153] 13 August 1950 [West End Common, Surrey. LondonHets]
- 08D: 16 August 1952 [Banstead Wood, Surrey. LondonHets] 18 August 1932 [Epping Forest, Essex. LondonHets] 20 August 1967 [Ockham, Surrey. PTSLENHS1967:120-121] 18 August 1945 [Purley, Surrey. LondonHets] 20 August 1951 [West End Common, Surrey. LondonHets]
- 08E: 22 August 1948 [Between Lye Rock and Bossiney Cove, North Cornwall. Female. EMM85:84] 21 August 2002 [Pendeen Old Cliff, Cornwall. CornwallHets]

- 08F: 28 August 1881 [Addington, Surrey. LondonHets] 26 August 1941 [Byfleet, Surrey. LondonHets] 30 August 1934 [Clifden, West Galway. IrelandHets] 28 August 1950 [Esher Common, Surrey. LondonHets] 29 August 1936 [Fallend, Cumberland. Adults. ERJV51:160-161] 29 August 1984 [Hankley Common, Surrey. PTBENHS18:20] 28 August 2005 [Seil Island, Argyll & Bute. Adult. Atropos26:59] 27 August 2010 [Witley Common, Surrey. Hem6:244] 28 August 1956 [Wolvercote, Oxford. Adults. EMM93:10]
- 09A: 2 September 1950 [Epping Forest, Essex. LondonHets] 2 September 1950 [Esher Common, Surrey. LondonHets] 4 September 1954 [Riddlesdown, Surrey. PTSLENHS1954-55:93-94] 4 September 1938 [Westerham, Kent. LondonHets] 5 September 1952 [Wigpool Common, Gloucestershire. GloucsHets]
- 09B: 7 September 1947 [Epping Forest, Essex. LondonHets] 8 September 1956 [Esher Common, Surrey. LondonHets] 6 September 2011 [Minety Common, VC7. Adult. Hem6:264] 10 September 1934 [New Forest. EMM71:113-114] 9 September 1951 [Walton-on-the-Hill, Surrey. LondonHets] 7 September 1991 [Whelford Pools, Gloucestershire. GloucsHets]
- 09C: 11 September 1934 [Grounds of Imperial College Biological Field station, Slough. LondonHets] 12 September 1934 [Grounds of Imperial College Biological Field station, Slough. LondonHets] 14 September 1934 [Imperial College Biological Field Station, Slough. Egg batch. TSBE2:47-67] 14 September 1991 [Nagshead Dean, Gloucestershire. GloucsHets] 12 September 1929 [Ringwood, Hampshire. Ent62:232] 13 September 1944 [Totternhoe, near Dunstable, Bedfordshire. EMM81:183-185] 14 September 1997 [Witham Marshes, Lincoln, VC53. Hem3:84]
- 09D: 19 September 1897 [Esher Common, Surrey. LondonHets] 16 September 1952 [Hounslow Heath, Middlesex. Ent86:34-40] 16 September 1945 [Landford, Wiltshire. EMM88:45] 20 September 1980 [Mullion, Cornwall. CornwallHets] 18 September 1955 [Otford, Kent. LondonHets]
- 09E: 25 September 1976 [Darenth Wood, Kent. LondonHets] 22 September 1980 [Goonhilly, Cornwall. CornwallHets] 21 September 1968 [Pilgrim Fort, Caterham, Surrey. LondonHets] 25 September 2010 [Windyhills, VC93. HN16:11] 21 September 1904 [Wisley, Surrey. LondonHets]
- 09F: 29 September 2004 [Clitters Wood, Gunnislake, Cornwall. CornwallHets] 27 September 1958 [Coulsdon, Surrey. LondonHets] 28 September 1890 [Dartford Heath, Kent. LondonHets] 30 September 1872 [Shirley Heath. TESL1872:283-285]
- 10A: 4 October 1924 [Devil's Glen, Co Wicklow. IrelandHets] 1 October 1996 [Millook Woods, Cornwall. CornwallHets] 1 October 1903 [Shirley Common, Surrey. LondonHets] 2 October 1954 [Tregaron Bog, Cardiganshire. Male. EMM92:54-64]
- 10B: 9 October 2010 [North Wales. Adults. HN16:11] 10 October 2010 [Somerset. HN16:11] 9 October 2010 [St Osyth, VC19. HN16:11]
- 10C: 11 October 1954 [Arbrook Common, Surrey. Nymph reared in culture. EMM91:vii] 11 October 1948 [Esher Common, Surrey. LondonHets] 11 October 1954 [Esher Common, Surrey. Nymph. EMM91:iii] 14 October 1860 [Weybridge, Surrey. LondonHets]
- 10D: 18 October 1940 [Chobham, Surrey. LondonHets]
- 10E: 22 October 1975 [Dagnam Park, Essex. LondonHets] 22 October 1946 [Orpington, Kent. LondonHets]
- 10F: 26 October 1980 [Midger Wood, Gloucestershire. GloucsHets] 30 October 2010 [Newhaven, VC14. HN16:11]
- 11D: 18 November 2006 [Sussex. HN16:11]

# Piezodorus lituratus (Fabricius) (Pentatomidae)

- 02A: 3 February 2006 [Carn Entral Farm, Brea, Cornwall. CornwallHets]
- 02C: 13 February 2019 [St Nicholas Fields LNR, York, VC62. Bronzy winter form and green spring form. Hem6:237]
- 03D: 16 March 1936 [Uxbridge, Middlesex. Ent71:148-153]
- 03E: 23 March 1929 [Banstead, Surrey. LondonHets] 23 March 1978 [Dartford Heath, Kent. LondonHets] 24 March 2012 [Heighton Hill, near Newhaven, VC14. ERJV124:179-181] 25 March 2004 [Lesceave Cliff, Cornwall. CornwallHets]

- 03F: 31 March 2003 [Park Head, Cornwall. CornwallHets]
- 04B: 6 April 1952 [Between Port Erin and Bradda Head, Isle of Man. EMM88:159]
- 04D: 16 April 1952 [Abbey Wood, Kent. LondonHets] 16 April 2014 [Hugglescote coal waste site, VC55. Hem3:92] 20 April 1984 [Rinsey Cliff, Cornwall. CornwallHets] 19 April 1919 [St John's, Cornwall. CornwallHets]
- 04E: 22 April 1950 [Epping Forest, Essex. LondonHets] 22 April 1935 [Uxbridge, Middlesex. Ent71:148-153]
- 04F: 27 April 1993 [Housham, VC53. Hem3:84]
- 05A: 2 May 1909 [Sutton and Howth, Co Dublin. IrelandHets]
- 05B: 10 May 1952 [Barnsthorn Wood, Effingham, Surrey. LondonHets] 6 May 1928 [Dunamace, Queen's County. IrelandHets]
- 05C: 14 May 1949 [Byfleet, Surrey. LondonHets] 13 May 1950 [Colley Hill district, Surrey. LondonHets] 11 May 1980 [Mitcham Common, Surrey. LondonHets] 13 May 1893 [Oxshott, Surrey. LondonHets] 12 May 1924 [St Martha's, Chilworth, Surrey. PTSLENHS1934-35:12-15] 13 May 1906 [Weybridge, Surrey. LondonHets]
- 05D: 16 May 1948 [Baker's Wood, Heath and Reach, Bedfordshire. EMM86:6-8] 18 May 1929 [Byfleet, Surrey. LondonHets] 16 May 1900 [Poyntzpass, Co Armagh. IrelandHets]
- 05E: 23 May 1911 [Ashstead, Surrey. LondonHets] 21 May 1990 [Pentire Haven, Cornwall. CornwallHets] 25 May 1947 [Weybridge, Surrey. LondonHets]
- 05F: 30 May 1954 [Chailey, Sussex. PTSLENHS1954-55:81-83] 30 May 1906 [Chobham, Surrey. LondonHets] 30 May 1992 [Cutsdean Quarry, Gloucestershire. GloucsHets] 27 May 1950 [Epping Forest, Essex. LondonHets] 29 May 1950 [Ongar Park Wood, Essex. LondonHets] 30 May 1944 [Whipsnade Heath, Bedfordshire. EMM86:6-8]
- 06B: 6 June 1903 [East Horsley, Surrey. Pair *in copula*. LondonHets] 8 June 1932 [Oxshott Heath, Surrey. LondonHets]
- 06C: 12 June 1943 [Hampstead Heath, Middlesex. LondonHets] 15 June 2015 [The Chase, Broad Layings, VC12. Hem3:54]
- 06D: 18 June 1984 [Freshwater, Isle of Wight. BJENH6:77] 16 June 1960 [Hunters Inn, North Devon. Female. EG12:77-79] 20 June 2001 [Mullion Cove village, Cornwall. CornwallHets] 20 June 1951 [West End Common, Surrey. LondonHets]
- 06E: 24 June 2003 [Cape Cornwall, Cornwall. CornwallHets]
- 06F: 31 June 1940 [Hampstead Heath, Middlesex. Nymph. LondonHets]
- 07A: 4 July 2015 [Sandy Point, Hayling Island, Hampshire. BJENH29:56-59]
- 07B: 7 July 1946 [Gerrard's Cross Common, Buckinghamshire. Eggs. EMM85:193-206]
- 07C: 14 July 1925 [Chalfont St Peter, Buckinghamshire. Nymph. LondonHets]
- 07D: 17 July 1955 [Aberystwyth, Cardiganshire. Female and nymph. EMM92:54-64] 20 July 2005 [Churchtown Farm, Saltash, Cornwall. CornwallHets]
- 07E: 25 July 2012 [Mill Lane LNR, Walsall, VC39. Hem3:92]
- 07F: 27 July 2006 [Black Head, Cornwall. CornwallHets] 30 July 1939 [Hampstead Heath, Middlesex. Nymph. LondonHets]
- 08A: 3 August 1947 [Cockhayne Hatley Wood, Bedfordshire. EMM86:6-8]
- 08B: 10 August 1976 [Darenth Wood, Kent. LondonHets] 8 August 1964 [Dungeness, Kent. PTSLENHS1964:36]
- 08C: 15 August 2015 [South Norwood Country Park, London. Adults and nymphs. BJENH29:122-125]
- 08D: 19 August 1985 [Cinderford, Gloucestershire. GloucsHets] 20 August 1948 [Moneypot Hill, Ampthill, Bedfordshire. Nymphs. EMM86:6-8] 17 August 1985 [Newborough Warren NNR, Anglesey. HSGN6:3] 18 August 2006 [Porthoustock, Cornwall. CornwallHets] 17 August 1934 [Uxbridge, Middlesex. Ent71:148-153] 18 August 1933 [Woking, Surrey. LondonHets]
- 08E: 22 August 2006 [Lansallos East Coombe, Cornwall. CornwallHets] 22 August 1984 [Pexhill, Cronton, Merseyside. Melanic adult male. EMM122:188] 23 August 2006 [Rinsey Cliff, Cornwall. CornwallHets] 21 August 2007 [Templenoe, Co Kerry. Adults and nymphs. HN10:13] 25 August 1984 [Tiptree, North Essex. HSGN4:4]
- 08F: 30 August 1936 [Blackheath and Farley Heath. PTSLENHS1936-37:35-36] 30 August 1933 [Bray, Co Wicklow. IrelandHets] 31 August 1934 [Dumfriesshire. Adult and nymphs.

- EMM71:164] 30 August 1940 [Harpenden, Hertfordshire. LondonHets] 31 August 1931 [Macmine, Co Wexford. Nymph. IrelandHets] 29 August 2006 [Mawnan Church to Porth Saxon, Cornwall. CornwallHets]
- 09A: 4 September 1949 [Ash Vale, Surrey. PTSLENHS1949-50:78] 1 September 1991 [Astonbridge Hill, Gloucestershire. Nymphs. GloucsHets] 1 September 1894 [Shirley Common, Surrey. LondonHets] 3 September 1931 [Woking, Surrey. LondonHets]
- 09B: 9 September 2006 [Duchy College, Rosewarne, Cornwall. CornwallHets] 6 September 1971 [Longcross Halt, Chobham Common, Surrey. EMM108:59] 7 September 1991 [Whelford Pools, Gloucestershire. GloucsHets]
- 09C: 14 September 1991 [Nagshead Dean, Gloucestershire. GloucsHets]
- 09D: 20 September 1890 [Dartford, Kent. LondonHets] 16 September 1932 [Horsell Common, Surrey. LondonHets] 19 September 1983 [Mitcham Common, Surrey. LondonHets] 20 September 1983 [Mitcham Common, Surrey. LondonHets] 17 September 1898 [West Wickham, Kent. LondonHets]
- 09F: 26 September 1901 [Lough Neagh, Co Antrim. IrelandHets] 26 September 1983 [Mitcham Common, Surrey. LondonHets] 27 September 1983 [Mitcham Common, Surrey. LondonHets] 28 September 1892 [Oxshott, Surrey. LondonHets]
- 10A: 5 October 1907 [Oxshott, Surrey. LondonHets] 5 October 1950 [West End Common, Surrey. LondonHets]
- 10B: 6 October 1983 [Freshwater, Isle of Wight. BJENH6:77] 8 October 1898 [West Wickham, Kent. LondonHets] 8 October 1951 [Wimbledon Common, Surrey. LondonHets]
- 10C: 14 October 1949 [Ash Vale, Surrey. LondonHets] 12 October 1984 [Thames Marshes, Belvedere, Kent. ERJV101:47-49]
- 10D: 18 October 1900 [Acton Glebe, Poyntzpass. Adults and nymphs. EMM37:73-74] 18 October 1932 [Danbury, Essex. LondonHets] 17 October 1983 [Mitcham Common, Surrey. LondonHets] 19 October 1932 [Pyrford, Surrey. LondonHets]
- 10E: 22 October 1983 [Freshwater, Isle of Wight. BJENH6:77]
- 11D: 17 November 1900 [Acton Glebe, Poyntzpass. Adults and nymphs. EMM37:73-74]
- 12B: 6 December 1900 [Acton Glebe, Poyntzpass. EMM37:73-74]

# Podops inunctus (Fabricius) (Pentatomidae)

- 01A: 3 January 1885 [Headley Lane. PESL1885:iii]
- 02A: 2 February 1934 [West Hyde, Hertfordshire. Adult. LondonHets]
- 03C: 12 March 1922 [Otford, Kent. LondonHets]
- 03F: 31 March 1990 [Bredon Hill, Worcestershire. EMM129:60] 27 March 1993 [Iron Mills Common, Gloucestershire. GloucsHets] 28 March 1976 [Near South Weald, Essex. LondonHets]
- 04A: 1 April 1984 [Fox Wood area, Edgeworth, Gloucestershire. GloucsHets] 1 April 1944 [Harefield, Middlesex. LondonHets]
- 04B: 10 April 2004 [Rand Wood, VC54. Hem3:84] 8 April 1941 [Woking, Surrey, LondonHets]
- 04D: 18 April 1984 [Upton Towans, Cornwall. CornwallHets]
- 04F: 29 April 1893 [Bagley Wood, near Oxford, VC22. EMM29:191-192] 27 April 1962 [Farningham Wood, Kent. LondonHets] 30 April 1962 [Magpie Bottom, near Otford, Kent. LondonHets]
- 05A: 1 May 1960 [Banstead, Surrey. LondonHets] 1 May 1960 [Chipstead, Surrey. LondonHets] 3 May 1944 [Dunstable, Bedordshire. Female. EMM81:42] 5 May 2000 [New Polzeath, Cornwall. CornwallHets]
- 05B: 7 May 1950 [Canvey Island, Essex. LondonHets] 7 May 1961 [Deal, Kent. PTSLENHS1961:75-76]
- 05D: 20 May 1951 [Panshanger Park, near Hertford, Hertfordshire. LondonHets] 18 May 1942 [Rendcomb, near Cirencester, Gloucestershire. EMM80:18-19]
- 05E: 25 May 2015 [Allington Farm, VC8. Hem6:230] 25 May 1989 [Cubert Common, Cornwall. CornwallHets] 25 May 1989 [Holywell Dunes, Cornwall. CornwallHets] 22 May 1938 [Isle of Wight. PTSLENHS1938-39:43-44] 24 May 1915 [Near Dawlish, South Devon. EMM51:220] 23 May 1946 [Slough, Buckinghamshire. Female. EMM85:193-206] 22 May 1954 [Stanford-

- le-Hope, Essex. PTSLENHS1954-55:81] 21 May 1990 [The Rumps, Pentire Head, Cornwall. CornwallHets] 24 May 1946 [Well Head, Bedfordshire. EMM86:6-8]
- 05F: 27 May 1950 [Church Woods, Blean, Kent. EMM86:224] 27 May 1900 [Rickmansworth, Hertfordshire. LondonHets] 30 May 1985 [Rodborough Common, Gloucestershire. GloucsHets]
- 06A: 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236] 2 June 1991 [Swifts Hill, Gloucestershire. GloucsHets]
- 06B: 9 June 1963 [Challock, Kent. PTSLENHS1963Part1:67]
- 06C: 11 June 1899 [Lea Valley. EMM35:270] 12 June 2004 [Prussia Cove to Cudden Point, Cornwall. CornwallHets]
- 06D: 16 June 1900 [Banstead, Surrey. LondonHets] 20 June 2019 [Between Santon Warren and Two Mile Bottom, West Norfolk. Hem6:248] 17 June 2019 [Devil's Punchbowl, near Croxton, West Norfolk. Hem6:247] 18 June 1954 [Oatlands, Weybridge, Surrey. LondonHets] 16 June 1997 [Penhale Dunes, Cornwall. CornwallHets] 19 June 1977 [Sandwich Bay, Kent. PTBENHS11:66-67] 18 June 1998 [Woodlands Farm, near Bexley, West Kent. BJENH12:140-141]
- 06E: 21 June 2019 [Near Two Mile Bottom, West Norfolk. Hem6:248] 25 June 1977 [Northward Hill NNR, Kent. PTBENHS11:67-68]
- 06F: 29 June 1985 [MOD Ashchurch, Gloucestershire. GloucsHets] 29 June 1999 [Porthcothan, Cornwall. CornwallHets] 26 June 2012 [Shire Oak NR, Brownhills, VC39. Hem3:92]
- 07B: 6 July 1981 [Mullion Quarry, Cornwall. CornwallHets]
- 07C: 12 July 1989 [Pencannow Point, Cornwall. CornwallHets] 11 July 2003 [West Pentire, West Cornwall. BJENH18:165-170]
- 07D: 16 July 1933 [South Benfleet, Essex. LondonHets]
- 07E: 23 July 2014 [SE71, VC63. HN22:5]
- 07F: 27 July 1961 [Swanscombe cutting, Kent. LondonHets]
- 08A: 4 August 1934 [Imperial College Biological Field Station, Slough. TSBE2:47-67]
- 08B: 6 August 1895 [Bookham Common, Surrey. LondonHets] 9 August 2005 [Magdalen Hill Down Extension, VC12. Hem3:103]
- 08E: 25 August 1962 [Trottiscliffe, Kent. PTSLENHS1962:99-100]
- 08F: 28 August 1916 [Rickmansworth, Hertfordshire. Nymph. LondonHets] 31 August 2006 [West Pentire Farm, Crantock, Cornwall. CornwallHets]
- 09B: 10 September 1985 [Port Quin, Cornwall. CornwallHets]
- 09C: 12 September 1896 [Chesham, Buckinghamshire. LondonHets] 15 September 1962 [Darwin's Bank, Downe, Kent. LondonHets] 13 September 1944 [Totternhoe, near Dunstable, Bedfordshire. Males and female. EMM81:42]
- 09D: 19 September 1953 [Amersham, Buckinghamshire. LondonHets]
- 09E: 25 September 1934 [Ryarsh, Kent. LondonHets] 22 September 1946 [Stevington Wood, Bedfordshire. EMM86:6-8]
- 09F: 26 September 2013 [Narborough Dismantled Railway Line NR, VC28. Hem4:37] 28 September 2011 [Near Hitchcopse Pit NR, VC22. Hem2:47]
- 10A: 5 October 1976 [Darenth Wood, Kent. LondonHets]
- 10B: 9 October 2015 [West Moor Link Road (A630) at Edenthorpe, VC63. HN23:12]
- 10C: 14 October 1962 [Northchurch, Berkhampsted, Hertfordshire. LondonHets] 15 October 1950 [Ranmore Common, Surrey. LondonHets]
- 10E: 23 October 1943 [Harefield, Middlesex. LondonHets]
- 11A: 4 November 1962 [Farningham Wood, Kent. LondonHets]
- 11B: 10 November 1951 [Chessington, Surrey. LondonHets]
- 11F: 28 November 1964 [Shoreham, Kent. LondonHets]
- 12B: 8 December 1976 [Darenth Wood, Kent. LondonHets]

## Rhacognathus punctatus (Linnaeus) (Pentatomidae)

- 03D: 16 March 1929 [Dumfries, Scotland. EMM138:88]
- 04B: 6 April 1988 [Porth y Rhaw, Pembrokeshire. BJENH26:91-94]

- 04C: 12 April 1964 [Ash Vale, Surrey. PTSLENHS1964:7] 13 April 2016 [Dersingham Bog, VC28. Hem4:40] 12 April 1947 [Lonslade, Apsley Heath, Bedfordshire. EMM86:6-8] 15 April 1989 [Tywyn Burrows, Carmarthenshire. BJENH26:91-94]
- 04D: 20 April 1963 [Hothfield, Kent. PTSLENHS1963Part1:64] 16 April 2009 [Mare Hill Common, Milford, Surrey. BJENH23:204]
- 04E: 22 April 1871 [Bournemouth. EMM69:234-245]
- 04F: 28 April 1979 [Kirkconnell Flow, Dumfries & Galloway. EMM138:88] 27 April 1991 [Morfa Harlech dunes, Gwynedd. BJENH26:91-94]
- 05A: 1 May 1960 [Chobham Common, Surrey. LondonHets] 5 May 1984 [Hothfield Bog, Kent. PTBENHS18:20]
- 05B: 10 May 1952 [Bookham Common, Surrey. LondonHets]
- 05C: 12 May 1951 [Fenn's Moss, Wales. BJENH26:91-94] 15 May 1949 [Oxshott Heath, Surrey. LondonHets] 13 May 1906 [Weybridge, Surrey. LondonHets]
- 05D: 19 May 1999 [Goonhilly Downs, Cornwall. CornwallHets] 16 May [Linwood, Hampshire. JSBE1:194] 20 May 2005 [Tywyn Burrows, Carmarthenshire. BJENH26:91-94]
- 05E: 24 May 1989 [Pen Enys Point, West Cornwall. BJENH4:119-121]
- 05F: 28 May 1985 [Thurstaston Heath, Cheshire. EMM129:60]
- 06A: 4 June 1960 [River Wey, Eashing, Surrey. LondonHets]
- 06C: 12 June 2010 [Wildmoor Heath, Berkshire. BJENH29:43-44]
- 06D: 19 June 1989 [Cors y Llyn NNR, Radnorshire. BJENH26:91-94] 16 June 1996 [Pylon Ride, California Country Park, Berkshire. BJENH12:42-43]
- 07A: 5 July 1981 [Crousa Downs, Cornwall. CornwallHets]
- 07B: 7 July 1981 [Golgotham, Cornwall. CornwallHets] 6 July 1981 [Mullion, Cornwall. CornwallHets]
- 07C: 14 July 1958 [Bookham Common, Surrey. Nymph. LondonHets] 12 July 2014 [Crabtree Hill, Forest of Dean, Gloucestershire. Adult and nymph. HN22:10] 12 July 1994 [Kenfig Burrows NNR, Glamorgan. BJENH26:91-94] 12 July 1952 [Oxshott Heath and Esher Common. PTSLENHS1952-53:83-84]
- 07D: 17 July 1943 [Albury, Surrey. LondonHets] 16 July 2006 [Black Pond, Esher Common, Surrey. BJENH20:192] 20 July 2015 [Burnt Platt Wood, Oxfordshire Chilterns. BJENH29:43-44] 18 July 2009 [Edgehills, Forest of Dean, VC34. HN15:13]
- 07E: 23 July 1999 [Afon Tstwyth, Tynbedw, Cardiganshire. BJENH26:91-94]
- 07F: 29 July 1981 [Crousa Downs, Cornwall. CornwallHets]
- 08A: 4 August 1979 [Ambersham Common, West Sussex. PTBENHS17:18-19] 4 August 1955 [Esher Common, Surrey. Adults and nymphs. LondonHets] 3 August 1988 [Fenn's Moss, Wales. BJENH26:91-94] 3 August 1889 [Woking, Surrey. LondonHets]
- 08B: 10 August 2002 [Crabtree Hill, VC34. Adults. BJENH19:34-37] 10 August 2002 [Crabtree Hill, VC34. Nymphs. BJENH19:34-37] 7 August 1996 [Trevean Cliff, Cornwall. CornwallHets]
- 08C: 12 August 2005 [Ballynahorne More Bog NNR, County Londonderry. Adults. EMM142:62] 13 August 2005 [Lisnagunoge Bog, County Antrim. Nymph. EMM142:62]
- 08D: 20 August 2005 [Mweela Bog, Murrins NNR, Tyrone. Adults. EMM142:62] 17 August 1952 [Stoke Common, Buckinghamshire. LondonHets] 17 August 1931 [Woking, Surrey. LondonHets]
- 08F: 28 August 2000 [Lower slopes of Hallival, Isle of Rhum. EMM138:88] 26 August 1936 [Nutberry, Scotland. EMM138:88] 30 August 1930 [Quantock Hills, above Crowcombe, Somerset. EMM67:94] 26 August 1905 [Tuddenham Fen, Suffolk. SuffolkHetsAnn]
- 09A: 2 September 1950 [Esher Common, Surrey. LondonHets]
- 09B: 9 September 2000 [Glen Ogle, Perthshire. EMM138:88]
- 09E: 22 September 1980 [Gwendreath, Cornwall. CornwallHets]
- 09F: 26 September 1988 [Fairwood Common, Gower, South Wales. Males and a female. EMM126:88]

Rhaphigaster nebulosa (Poda) (Pentatomidae)

07E: 21 July 2010 [Earl's Court, VC21. Adult. HN21:5]

- 09A: 3 September 2013 [Newham, VC18. Adult and nymph. HN21:5]
- 09C: 13 September 2013 [Warwick Gardens, Peckham, London, VC15. BJENH27:123-124]
- 09D: 18 September 2011 [Lewisham, VC15. Male. HN17/18:5] 19 September 2011 [Lewisham, VC15. Females. HN17/18:5]
- 09E: 25 September 2011 [Lewisham, VC15. Male. HN17/18:5] 22 September 2011 [Warwick Gardens, Peckham Rye, VC17. Adults. HN17/18:5] 23 September 2011 [Warwick Gardens, Peckham, London. BJENH25:174]
- 10A: 1 October 2011 [Lewisham, VC15. Female. HN17/18:5]

# Sciocoris cursitans (Fabricius) (Pentatomidae)

- 02A: 3 February 1951 [Boxhill, Surrey. LondonHets]
- 04A: 4 April 1995 [Whitedowns, Surrey. Mating pairs. EMM133:79-80]
- 04B: 6 April 1920 [Bembridge, Isle of Wight. HantsHets]
- 04C: 15 April 1911 [Boxhill, Surrey. LondonHets] 14 April 1991 [Howell Hill NR, Cheam, Surrey. BJENH7:175]
- 04D: 17 April 1955 [Boxhill, Surrey. LondonHets] 19 April 1953 [Mitcham Common, Surrey. LondonHets]
- 04E: 23 April 1960 [Boxhill, Surrey. LondonHets] 25 April 1920 [Boxhill, Surrey. LondonHets]
- 04F: 27 April 1991 [Upton Towans, Cornwall. CornwallHets]
- 05A: 5 May 2005 [Crooks Peak, near Cheddar, VC6. HN5:6] 2 May 2001 [Enys Head, Cornwall. CornwallHets]
- 05B: 7 May 1922 [Boxhill, Surrey. LondonHets] 7 May 1961 [Deal, Kent. PTSLENHS1961:75-76]
- 05D: 19 May 1995 [Beagles Point, Cornwall. CornwallHets] 16 May 1989 [Godrevy Towans, Cornwall. CornwallHets] 17 May 1990 [Godrevy Towans, West Cornwall. BJENH4:119-121]
- 05E: 24 May 1999 [Lizard Point, Cornwall. CornwallHets] 22 May 1964 [Thorncombe Beacon, Dorset. EMM100:134]
- 05F: 31 May 1919 [Boxhill, Surrey. LondonHets] 29 May 2004 [Penhale Dunes, Cornwall. CornwallHets]
- 06A: 1 June 2006 [Bluewater, Dartford, W. Kent. BJENH20:193-194] 4 June 1997 [Southend Sewage Works. Adults. BJENH14:225-231]
- 06B: 9 June 1917 [Boxhill, Surrey. LondonHets] 9 June 2004 [Rochester. BJENH18:209]
- 06C: 14 June 2012 [Braeburn Park. BJENH29:69-88] 15 June 2003 [Gwithian Towans, Cornwall. CornwallHets]
- 06D: 16 June 1917 [Boxhill, Surrey. LondonHets] 18 June 1910 [Ranmore Common, Surrey. LondonHets]
- 06E: 24 June [Boxhill. PTSLENHS1951-52:xvi] 22 June 1942 [Boxhill, Surrey. LondonHets] 21 June 2000 [Northwick, Canvey, South Essex. BJENH14:225-231]
- 06F: 28 June 1998 [Kennack Sands, Cornwall. CornwallHets]
- 07D: 18 July 1946 [Mickleham, Surrey. LondonHets]
- 07F: 31 July 1952 [Darenth Wood, Kent. LondonHets]
- 08A: 4 August 1901 [Boxhill, Surrey. LondonHets] 2 August 2006 [Upton Towans, Cornwall. CornwallHets]
- 08B: 6 August 2006 [Woolwich Arsenal, VC16. HN11:12]
- 08C: 15 August 1897 [Near Box Hill, Surrey. EMM34:13-15]
- 08D: 16 August 1952 [Banstead Wood, Surrey. Nymph. LondonHets]
- 08F: 27 August 1910 [Boxhill, Surrey. LondonHets] 31 August 1952 [Darenth Wood. PTSLENHS1952-53:86] 30 August 1938 [Purfleet, South Essex. Female. EMM79:199] 27 August 1961 [Swanscombe, Kent. LondonHets]
- 09B: 8 September 1976 [Deal Sandhills, Kent. PTBENHS17:18-19] 6 September 2005 [M25 Junction 1B, VC16. Nymphs. HN6:9]
- 09C: 15 September 1917 [Boxhill, Surrey. LondonHets] 12 September 1953 [Juniper Valley, Boxhill, Surrey. PTSLENHS1953-54:91-92]
- 09D: 19 September 2011 [Hoddesdon Quarry, VC20. Hem4:151]
- 09F: 27 September 1996 [Southend Sewage Works. Adults. BJENH14:225-231]

Sciocoris homalonotus Fieber (Pentatomidae)

06B: 7 June 2016 [Coney Banks, Chatham, Kent. BJENH30:27-29]

Troilus luridus (Fabricius) (Pentatomidae)

02B: 9 February 1963 [Epping Forest, Essex. LondonHets]

02D: 17 February 1927 [Oxshott Heath, Surrey. LondonHets]

02E: 25 February 1945 [Lydney, Gloucestershire. GloucsHets]

03B: 6 March 1934 [Colne Valley, Uxbridge. Ent71:148-153]

03E: 24 March 2002 [Magdalen Hill Down Original Reserve, VC12. Hem3:103] 25 March 2002 [Marford quarry, VC50. Hem6:218]

03F: 26 March 1923 [Esher Common, Surrey. LondonHets]

04A: 2 April 1938 [Bookham Common, Surrey. LondonHets]

04B: 10 April 1954 [Effingham, Surrey. LondonHets]

04F: 26 April 1953 [Boxhill and Ranmore Common. PTSLENHS1953-54:77] 30 April 1938 [Oxshott Heath, Surrey. LondonHets]

05A: 4 May 1943 [Northwood, Middlesex. LondonHets]

05B: 9 May 1943 [Northwood, Middlesex. LondonHets]

05C: 13 May 1950 [Colley Hill district, Surrey. LondonHets] 14 May 1938 [Horsley, Surrey. LondonHets] 13 May 1943 [Rendcomb, Gloucestershire. GloucsHets] 13 May 1996 [Wheal Edward, Kenidjack Cliff, Cornwall. CornwallHets]

05D: 17 May 1989 [Porthmeor Valley, Cornwall. CornwallHets]

05E: 23 May 1991 [Baron Wood, near Armathwaite, Cumbria. ERJV104:42]

05F: 27 May 1950 [Church Woods, Blean, Kent. EMM86:224] 31 May 1952 [Monk's Wood, Huntingdonshire. EMM88:162] 30 May 1989 [Porth Joke, Cornwall. CornwallHets] 31 May 1989 [Tremayne Woods, Cornwall. CornwallHets]

06A: 5 June 1931 [Bookham Common, Surrey. Nymph. LondonHets] 3 June 1934 [Glenasmole, Co Dublin. IrelandHets]

06B: 10 June 1794 [Coombe-wood, Surrey. Nymph. EMM61:253-257] 6 June 1948 [Luton, Bedfordshire. EMM86:6-8]

06C: 11 June 1997 [Covert Wood, near Canterbury. ERJV111:27-35] 15 June 2014 [Millennium Wood (Lacy Wood), Box, near Corsham, North Wiltshire. Hem6:261] 12 June 2005 [Stowe Wood, Cornwall. CornwallHets]

06D: 20 June 1953 [Bookham Common, Surrey. Nymph. LondonHets] 17 June 1983 [Chalk Lane, The King's Forest, VC26. Hem4:18] 16 June 2008 [Hencott Pool, VC40. Hem3:93]

06F: 28 June 1941 [Byfleet, Surrey. Nymph. LondonHets] 28 June 1899 [Clonmaenoise, Co Westmeath. IrelandHets] 26 June 1794 [Darn-wood, Dartford. EMM61:253-257] 30 June 1946 [Deadmansea Wood, Bedfordshire. EMM86:6-8] 30 June 1951 [Oxshott. Nymphs. PTSLENHS1951-52:73-74]

07A: 1 July 1948 [Randan Wood, near Bromsgrove, Worcestershire. Nymphs. EMM87:7]

07B: 6 July 1942 [Byfleet, Surrey. LondonHets] 7 July 1981 [Trevassack, Cornwall. CornwallHets]

07C: 12 July 1958 [Epping Forest, Essex. LondonHets] 14 July 1947 [Hipsey Spinney, Bedfordshire. EMM86:6-8] 13 July 1946 [King's Wood, Bedfordshire. EMM86:6-8]

07D: 19 July 2002 [Carne Farm, Penpoll, Cornwall. CornwallHets] 17 July 1928 [Near Kilsheelin, Clonmel, South Tipperary. Adult. IrelandHets]

07E: 22 July 1956 [Amersham, Buckinghamshire. LondonHets] 25 July 2006 [Five Acres, Allet, Cornwall. Nymph. CornwallHets] 25 July 1948 [Flitwick Plantation, Bedfordshire. Nymphs. EMM86:6-8]

07F: 28 July 2004 [Bodmin Airfield, Cornwall. CornwallHets] 28 July 1950 [Fawkham, Kent. LondonHets]

08A: 2 August 1950 [Randan Wood, near Bromsgrove, Worcestershire. Nymph. EMM87:7]

08B: 9 August 1980 [Chalk Lane, The King's Forest, VC26. Hem4:18] 7 August 1950 [Randan Wood, near Bromsgrove, Worcestershire. Nymph. EMM87:7]

08C: 13 August 1967 [Bookham Common, Surrey. Nymph. PTSLENHS1967:120] 14 August 1998 [Clitters Mine, Gunnislake, Cornwall. CornwallHets]

- 08D: 16 August 1953 [Bookham Common, Surrey. Nymph. LondonHets] 18 August 1932 [Epping Forest, Essex. Nymph. LondonHets] 19 August 1933 [Eynsford, Kent. PTSLENHS1933-34:32-33] 20 August 1948 [Moneypot Hill, Ampthill, Bedfordshire. Nymphs. EMM86:6-8] 17 August 1985 [Newborough Warren NNR, Anglesey. HSGN6:3] 16 August 1906 [Wilverley Enclosure, New Forest. Nymph. TRESL55:323-408]
- 08E: 24 August 1934 [Ballynahinch, West Galway. IrelandHets] 25 August 1947 [Epping Forest, Essex. LondonHets] 22 August 1933 [Greystones, Co Wicklow. Nymph. IrelandHets] 25 August 2007 [Killarney National Park, Co Kerry. Nymph. HN10:13]
- 08F: 27 August 1982 [Kites Croft, VC11. Hem3:103] 29 August 2006 [Mawnan Church to Porth Saxon, Cornwall. CornwallHets] 26 August 1925 [Near Ross Castle, Killarney, North Kerry. IrelandHets] 26 August 1948 [Randan Wood, near Bromsgrove, Worcestershire. Nymphs. EMM87:7] 29 August 1948 [Randan Wood, near Bromsgrove, Worcestershire. Nymph. EMM87:7] 27 August 2010 [Witley Common, Surrey. Hem6:244]
- 09A: 5 September 1930 [Ballinafid Lough, Co Westmeath. Nymph. IrelandHets] 4 September 1937 [High Wycombe, Buckinghamshire. Nymph. LondonHets] 3 September 1988 [Near Brough Beech, Kent. Nymphs reared in culture. BJENH1:185] 1 September 1941 [Woking, Surrey. Adult and nymph. LondonHets]
- 09B: 8 September 1935 [Byfleet, Surrey. LondonHets] 8 September 1915 [Epping Forest, Essex. Adults and nymph. LondonHets] 6 September 1933 [Greystones, Co Wicklow. Adult. IrelandHets] 9 September 1997 [Treeton Wood, VC63. HN7:15] 8 September 1934 [Uxbridge and the Colne Valley, Middlesex. LondonHets] 7 September 1934 [West Hyde, Hertfordshire. LondonHets] 7 September 1991 [Whelford Pools, Gloucestershire. Adult and nymphs. GloucsHets]
- 09C: 11 September 1934 [Devil's Glen, Co Wicklow. IrelandHets] 15 September 1946 [King's Wood, Bedfordshire. EMM86:6-8] 14 September 1929 [Near Ennis, Co Clare. IrelandHets] 15 September 1947 [Randan Wood, near Bromsgrove, Worcestershire. Nymph reared in culture. EMM87:7] 15 September 1932 [Ranmore Common, Surrey. LondonHets] 12 September 1935 [Uxbridge and the Colne Valley, Middlesex. LondonHets]
- 09D: 18 September 1938 [Ashtead, Surrey. LondonHets] 18 September 1951 [Byfleet, Surrey. LondonHets] 18 September 1995 [Enys Woods, Cornwall. CornwallHets] 17 September 1951 [Esher Common, Surrey. LondonHets] 18 September 1955 [Otford, Kent. LondonHets] 17 September 1927 [Oxshott Heath, Surrey. LondonHets] 16 September 1948 [Randan Wood, near Bromsgrove, Worcestershire. Adult and nymph. EMM87:7]
- 09E: 21 September 1947 [Epping Forest, Essex. LondonHets] 24 September 1993 [Hartlebury Common LNR, Worcestershire. EMM133:17-26] 23 September 1934 [Ovoca, Co Wicklow. IrelandHets]
- 09F: 29 September 2004 [Clitters Mine, Gunnislake, Cornwall. Nymph. CornwallHets] 28 September 1946 [Heath and Reach, Bedfordshire. Nymph. EMM86:6-8] 26 September 1943 [Hilcot, Gloucestershire. GloucsHets]
- 10A: 2 October 1954 [Tregaron Bog, Cardiganshire. Males, females and nymphs. EMM92:54-64] 5 October 1950 [West End Common, Surrey. LondonHets]
- 10B: 7 October 1931 [Carbis Bay, Cornwall. TSBE1:51-84] 9 October 1930 [Carbis Bay, Cornwall. Male. JESSE1:60] 7 October 1952 [Esher Common, Surrey. LondonHets] 7 October 1956 [Mickleham Downs, Surrey. LondonHets]
- 10C: 14 October 1931 [Glenasmole, Co Dublin. IrelandHets]
- 10D: 19 October 1932 [Pyrford, Surrey. LondonHets] 17 October 1947 [Randan Wood, near Bromsgrove, Worcestershire. Adult. EMM87:7] 20 October 1940 [Reading district. Nymph, maturing a week later. EMM77:101-104] 17 October 1993 [Swanholme Lakes LNR, Lincoln, VC53. Hem3:84]
- 10E: 22 October 1950 [Amersham, Buckinghamshire. LondonHets]
- 11B: 8 November 1933 [Arbrook Common, Surrey. LondonHets] 6 November 1994 [Dowdeswell Wood, Gloucestershire. GloucsHets]
- 11C: 12 November 1954 [Arbrook Common, Surrey. LondonHets]
- 11E: 23 November 1932 [King Williams Glen, Louth. IrelandHets]
- 11F: 28 November 1979 [Rhandirmwyn, near Llandovery, Dyfed. EMM131:159-161]

- Zicrona caerulea (Linnaeus) (Pentatomidae)
  - 01F: 28 January 1999 [Magdalen Hill Down Extension, VC12. Hem3:104]
  - 02B: 8 February 1990 [Broadway, Worcestershire. EMM129:60]
  - 03F: 31 March 2008 [Thorpe-le-Soken, VC19. Adult. HN11:10]
  - 04A: 5 April 1964 [Magpie Bottom, Kent. Adult. LondonHets] 4 April 1904 [The Moors near Blanchland. ERJV17:47]
  - 04B: 9 April 1954 [Banstead, Surrey. A pair. PTSLENHS1954-55:5]
  - 04D: 20 April 1946 [Green Way, Shurdington, Gloucestershire. GloucsHets] 16 April 1950 [Ongar Park Wood, Essex. LondonHets]
  - 04F: 29 April 1928 [Clara, Co Wicklow. IrelandHets]
  - 05A: 5 May 2005 [Crooks Peak, near Cheddar, VC6. HN5:6] 5 May 1960 [Cuffley Station, Hertfordshire. LondonHets] 5 May 1941 [Rendcomb, Gloucestershire. GloucsHets]
  - 05B: 6 May 1956 [New Years Wood, Cudham, Kent. LondonHets]
  - 05C: 13 May 1992 [Old Down, Gloucestershire. GloucsHets]
  - 05E: 21-24 May 2007 [Mary Knoll Valley, Herefordshire. BJENH21:187-192] 25 May 2005 [Sand Point, VC6. HN6:14]
  - 05F: 28 May 1944 [Monkham, Gloucestershire. GloucsHets] 31 May 1985 [Rack Isle, Bibury, Gloucestershire. GloucsHets] 29 May 1985 [River Windrush, Sherborne, Gloucestershire. GloucsHets] 29 May 1994 [Williamshope, VC79. BJENH18:223]
  - 06A: 3 June 1986 [Llanymynech, Powys. PTBENHS20:67] 1 June 1902 [Miller's Dale, Buxton. EMM41:27]
  - 06B: 7 June 1954 [Longdown Hill, Buckinghamshire Chilterns. Adults, nymphs and eggs. EMM90:303] 8 June 1934 [Rocky Valley, Co Wicklow. IrelandHets]
  - 06C: 15 June 1934 [Dargle River, Powerscourt Deerpark, Co Wicklow. IrelandHets] 15 June 1887 [Gomshall, Surrey. LondonHets] 11 June 2001 [Kites Croft, South Hampshire. BJENH15:180] 13 June 2005 [Polgeel Wood, Cornwall. CornwallHets] 13 June 1958 [Tarfside, VC90. BJENH18:223] 15 June 1993 [Whisby Pits Nature Park, VC53. Hem3:84] 15 June 2015 [Woodmancote, Gloucestershire. HN23:10]
  - 06D: 19 June 1951 [Delamere, Cheshire. EMM87:328] 18 June 2015 [Woodmancote, Gloucestershire. HN23:10]
  - 06E: 25 June 1926 [Cornwall. TSBE1:51-84] 23 June 1896 [Mickleham, Surrey. Nymph. LondonHets]
  - 06F: 30 June 1898 [Headley, Surrey. LondonHets] 29 June 1986 [Lower slopes of Beinn a'Ghlo, VC89. BJENH18:223] 30 June 1985 [Luckett Reserve, Cornwall. CornwallHets] 29 June 1930 [Mount Butler, Roscrea, North Tipperary. IrelandHets] 30 June 1985 [Oakley Wood, Gloucestershire. GloucsHets] 29 June 1899 [River Shannon, Clonmacnoise, King's County. Nymph. IrelandHets]
  - 07A: 2 July 1951 [Garvald, VC82. BJENH18:223] 3 July 2015 [Padworth Recycling Centre. BJENH29:69-88] 1 July 1901 [Thomastown, Co Kilkenny. IrelandHets]
  - 07B: 9 July 2005 [Aysgarth Falls National Park Centre, Aysgarth, VC65. Hem6:217] 10 July 1868 [G. Wooton (Glanvilles Wootton). EMM69:234-245] 9 July 1900 [Slaney Estuary, Killurin. IrelandHets]
  - 07C: 15 July 1989 [Rodborough Common, Gloucestershire. GloucsHets]
  - 07D: 17 July 1949 [Shoreham, Kent. LondonHets]
  - 07E: 24 July 1948 [King's Wood, Bedfordshire. EMM86:6-8] 25 July 1915 [Royston, Hertfordshire. Ent49:69] 23 July 2015 [Spoonley Wood, near Winchcombe, Gloucestershire. Nymph. HN23:10] 22 July 2015 [TL46, VC29. Hem3:93]
  - 07F: 28 July 1983 [Boxhill, Surrey. LondonHets] 30 July 1944 [Long Lane, Tingrith, Bedfordshire. EMM81:183-185] 28 July 1954 [Park Downs, Banstead, Surrey. Adult. EMM92:47-48]
  - 08A: 1-2 August 1954 [Coombe Hill, Buckinghamshire Chilterns. Nymphs. EMM90:303] 3
    August 1982 [Dunmore Moss, VC86. BJENH18:223] 4 August 1982 [Dunmore Moss, VC86.
    BJENH18:223] 2 August 1954 [Longdown Hill, Buckinghamshire Chilterns. Nymphs.
    EMM90:303] 1 August 1895 [Mickleham, Surrey. LondonHets]

08B: 6 August 1929 [Kilcarry, Co Carlow. IrelandHets] 7 August 1934 [Newton Moss, Dumfriesshire. EMM71:164]

08C: 12 August 1940 [Kinross, VC85. BJENH18:223] 14 August 1961 [Near Ayton, VC81. Nymphs. BJENH18:223]

08D: 16 August 1937 [Kirkmichael, VC89. BJENH18:223] 16 August 1925 [Mickleham Downs, Surrey. LondonHets]

08F: 28 August 2007 [Kenmare uplands, Kerry Way, Co Kerry. Nymph. HN10:13] 29 August 1945 [Leatherhead, Surrey. LondonHets] 29 August 1954 [Mickleham Downs, Surrey. LondonHets] 28 August 1927 [Powerscourt Deerpark, Co Wicklow. IrelandHets]

09A: 4 September 1948 [Aspley Heath, Bedfordshire. EMM86:6-8] 5 September 1930 [Ballinafid Lough, Co Westmeath. IrelandHets] 4 September 1937 [High Wycombe, Buckinghamshire. LondonHets] 4 September 1930 [Lough Ennell, Co Westmeath. IrelandHets] 3 September 1979 [Norton, Worcester. EMM129:60] 3 September 1930 [Royal Canal, near Mullingar, Westmeath. IrelandHets]

09B: 7 September 1895 [Mickleham, Surrey. LondonHets]

09C: 13 September 1926 [Mickleham, Surrey. LondonHets]

09F: 29 September 1877 [G. Woot. (Glanvilles Wootton). EMM69:234-245]

10B: 9 October 1994 [Woodchester Park, Gloucestershire. GloucsHets]

10D: 18 October 1892 [Boxhill, Surrey. LondonHets] 16 October 1895 [Oxshott, Surrey. LondonHets]

10E: 23 October 1943 [Harefield, Middlesex. LondonHets]

# **Detailed records**

Aelia acuminata (Linnaeus) (Pentatomidae)

In moss beneath *Juniperus* [Near Salisbury, Wiltshire. 1 April 1950. EMM87:139]

In a patch of rough ground in a garden [Maidenhead, Berkshire. 10 May 1980. EMM116:132]

On forget-me-nots [Minting Wood, VC54. 13 May 2007. HN10:13]

On Bromus [Horsley, Surrey. 17 May 1952. LondonHets]

Sweeping grasses on chalk down [Shere, Surrey. 25 May 1888. LondonHets]

In a garden [Maidenhead, Berkshire. 31 May 1979. EMM114:159]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. 27 May 2005. HN5:7]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

Sweeping a woodland ride [Pentimore Wood, Northamptonshire. 2 June 2014. Hem2:26]

Sweeping along a dismantled railway line [Helmdon, Northamptonshire. 6 June 2014. Hem2:26]

Sweeping along a dismantled railway line [Helmdon, Northamptonshire. 19 June 2014. Hem2:26]

Sweeping *Phragmites* [Rinsey East Cliff, Cornwall. 20 June 1979. CornwallHets]

Roadside grass bank [Near Farnham, Surrey. 3 July 1953. LondonHets]

Canal bank [Byfleet, Surrey. 8 July 1950. LondonHets]

Amongst grasses in a quarry [Flagstaff Quarry, near Penmon, Anglesey. 15 July 1984. EMM123:76]

Sweeping an area of seeding grasses [Hounslow Heath, Middlesex. 14 July 1953. Nymphs. Ent87:15-18]

Sweeping *Ammophila arenaria* and long, dry grass on sand dunes [Ynyslas, Cardiganshire. 17 July 1955. Males, females and nymphs. EMM92:54-64]

Sweeping grass [Hounslow Heath, Middlesex. 26 July 1953. Nymphs. EMM89:303]

Sweeping dry grassland adjacent to arable [Near Alderton, Gloucestershire. 31 July 2009. HN16:12]

In long, acid grassland [Middlewick Ranges, Colchester, Essex. 4 August 2005. HN6:8]

Under Erodium [Worlington and Freckenham, Suffolk. 5 August 1934. EMM71:113-114]

Sweeping fine, dry, long grass on an artificial mound covering a water-tank in a wood [Albury, Surrey. 15 August 1899. Butler1923]

Sweeping *Ononis-Ammophila* association on sand dunes [Ynyslas, Cardiganshire. 15 August 1955. EMM92:54-64]

Sweeping heather [Baddesley Common, Warwickshire. 23 August 2005. Adults and nymphs. HN7:11]

On grassland [Maulden Wood, VC30. 29 August 2008. Adults and nymph. HN13:10]

Sweeping grass [Ash Vale, Surrey. 4 September 1949. PTSLENHS1949-50:78]

Sweeping [Downas Valley, Cornwall. 1 September 2002. CornwallHets]

Sweeping dry grassland on a brownfield site [The Moors, Colchester, Essex. 2 September 2005. HN6:8]

In long grass [Ash Vale, Surrey. 10 September 1950. Adults and nymph. LondonHets]

Sweeping tall grass [Daneway Banks, Gloucestershire. 16 September 1986. GloucsHets]

Sweeping a neglected margin of an arable field by a road [Near North Stoke, VC23. 17 September 2018. Hem6:219]

Sweeping low mixed herbage at the edge of a strip of semi-woodland [Woolwich Common, West Kent. 19 September 1998. ERJV111:204]

Under a stone used to keep open a garage door [Maidenhead, Berkshire. 2 October 1971. EMM114:159]

Sweeping long, dry grass on a mound in a wood [Abinger, Surrey. August 1899. LondonHets]

In garden [Angarrack, Cornwall. May 2004. CornwallHets]

On thistles [Barham, Suffolk. August. Nymph. SuffolkHets]

Beating [Darenth Wood. June & July. EMM7:184-185]

Sweeping [Deal. EMM26:81-82]

From post-industrial sites [Dearne Valley, VC63. 2008. HN13:11]

In less disturbed areas of grassland [Dinton Pastures Country Park, Berkshire. BJENH7:118-126]

Sweeping tall grasses [Duchy College, Rosewarne, Cornwall. 2004, 2005 & 2006. CornwallHets]

In tall and rank grasses, including marram [England. S&L1959]

On waste land with tall, dry grass stems near a railway station [Fleet, Hampshire. August 1903. Adults and nymphs. Butler1923]

Sweeping grassy areas [Grounds of Pest Infestation Laboratory, Slough. August 1950. EMM87:103]

On rough ground, ruderal sites, parks and gardens [London area. BJENH12:193-213]

From a rough meadow [Marley, Sussex (near Haslemere, Surrey). 1940-45. EMM82:199-200]

Among long dry grass [Near Sandown, Isle of Wight. EMM60:117-118]

Sweeping in a clover field [Near Winchester. May. EMM11:208]

In tall grass [Porthleven, Cornwall. CornwallHets]

From rough grassland on a river embankment [River Thames, next to Chelsea Power Station, VC21. August 2000. ERJV112:267-268]

Bred *Asolcus waloffae* (Hymenoptera) from eggs [Silwood Park, Berkshire. June 1965. TRESL120:417-436]

On derelict ground adjoining wharfs [South London. BJENH12:193-213]

From post-industrial sites [Upper Don Valley, VC63. HN13:11]

On re-vegetated post-industrial sites containing rough, flower-rich grassland [VC63. 2010. HN16:13]

Amongst grass [Weybridge, Surrey. August. LondonHets]

Sweeping grass [Winterton, Norfolk. June 1951. ERJV64:115]

Sweeping coastal grassland [Wivenhoe Marsh, Essex. August 2004. Adults and nymphs. HN6:8]

Carpocoris purpureipennis (De Geer) (Pentatomidae)

Nettle [Winterborne, Bristol, VC34. 4 October 1995. Male. EMM137:72]

Sunning on a beach hut [Portland Bill area, VC9. 15 October 2005. ERJV118:31-33]

Carpocoris purpureipennis/mediterraneus AMBIGUOUS (Pentatomidae)

On the coast [North Essex coast. 19 August 1901. EMM38:66]

Attracted to light [Wye. August 1926. PTSLENHS1962:123-183]

Chlorochroa juniperina (Linnaeus) (Pentatomidae)

Picked off juniper [Caterham Valley. 26 March 1873. EMM9:292]

Alighted on a furze bush growing on chalk hills. In culture, observed feeding on a wide range of plants, particularly lilac [Whiteparish, near Salisbury, Wiltshire. 15 April 1946. Male. EMM83:14-15]

Beating hazel or blackthorn [Miller's Dale, Buxton. June 1902. EMM41:27]

On junipers [Boxhill, Surrey. LondonHets]

From juniper berries [S. Heywood, Lancashire. 1925. HSGN7:6]

On Junipers [Sanderstead, Caterham and Mickleham. Saunders1892]

Dolycoris baccarum (Linnaeus) (Pentatomidae)

In a garden [Burford, VC23. 19 April 2007. HN9:13]

Beside a broad woodland ride, crawling on ground litter and low plants. Some in flight and some pairing [Brede High Wood, East Sussex. 23 April 2004. HN3:6]

Crawling over dead Beech leaves, twigs and bramble stems beside a woodland ride [Brede Wood, VC14. 25 April 2004. Including mating pairs. HN7:14]

Sweeping and beating low bushes and hawthorn [Bagley Wood, near Oxford, VC22. 28 April 1893. EMM29:191-192]

Canal bank [Byfleet, Surrey. 14 May 1949. LondonHets]

On buddleia [Mylor, Cornwall. 23 May 1975. PTBENHS8:64]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. 27 May 2005. HN5:7]

On dandelion flower [Oakridge Lynch, Gloucestershire. 26 May 1985. GloucsHets]

Sweeping chalk grassland [Booker, near High Wycombe, Buckinghamshire. 3 June 1951. EMM87:236]

Sweeping a woodland ride [Pentimore Wood, Northamptonshire. 2 June 2014. Hem2:26]

Sweeping herbage [Morroch Bay, Portpatrick, Wigtownshire. 15 June 1972. EMM109:112-113]

Sweeping/beating along woodland rides and in clearings [The Chase, Broad Layings, VC12. 15 June 2015. Hem3:53]

On dog's mercury [Oakley Wood, Gloucestershire. 30 June 1985. Mating pair. GloucsHets]

In an old Brassica seedbed overgrown with weeds [Starcross, South Devon. 5 July 1944. Ent88:89-91]

In arable fields [West Pentire, West Cornwall. 11 July 2003. BJENH18:165-170]

Sweeping on downs [Reigate Hill, Surrey. 4 August 1949. LondonHets]

Sweeping a woodland ride [Near Birch Hall, Langdale Forest, North York Moors. 8 August 2018. Hem6:215]

On *Hypericum perforatum* [Grounds of the Pest Infestation Laboratory, Slough. 13 August 1951. Nymph. EMM87:274]

Sand dunes [Ynyslas, Cardiganshire. 15 August 1955. EMM92:54-64]

Sweeping at night [Aberystwyth, Cardiganshire. 3 September 1955. EMM92:54-64]

On the fruiting heads of wild carrot by a railway [Three Mile Stone, near Truro, Cornwall. 4 September. ERJV48:131-132]

Sweeping [Grounds of the Pest Infestation Laboratory, Slough. 7 September 1951. Adults. EMM87:274]

Sweeping clover on a railway embankment [Longcross Halt, Chobham Common, Surrey. 6 September 1971. EMM108:59]

On thistles [New Forest. 10 September 1934. EMM71:113-114]

On flower head of *Heracleum sphondylium* [Headley Lane, Surrey. 20 September 1950. LondonHets]

On yarrow flowerhead [Ampney Sheephouse, Gloucestershire. 21 September 1994. GloucsHets]

On Achillea millefolia [Kinnoull Hill, Perth. 21 September 1899. Ent33:10]

On blackberry [Roughan Crag, Kilnaboy, Co Clare. 22 September 1960. Female. EG12:77-79]

Sweeping low herbage in a clearing in a wood [Skellingthorpe Old Wood, near Lincoln, VC53. 16 October 2005. HN7:16]

On sandhills [Arklow, Co Wicklow. July 1926. Adult and nymph. IrelandHets]

Sweeping [Barton Mills, Suffolk. June. SuffolkHets]

In dry grassland [Bedfordshire. 1996. EMM133:261-262]

Sweeping [Benacre Broad, Suffolk. October. SuffolkHets]

In garden [Bodmin, Cornwall. CornwallHets]

On flower heads of Downy Woundwort (*Stachys germanica*) [Burford, VC23. September 2010. Adults and nymphs. HN16:11]

Sandhills [Carmarthenshire. Butler1923]

Breeding colonies in association with *Erodium* on sandhills [Coast of Devon and Cornwall. July 1957. EMM94:24]

Cliffs [Deal. EMM26:81-82]

Vacuum sampling on chalk grassland [Dorset. Stage unknown. HN2:7]

Amongst *Ononis* [Ferryside, Carmarthenshire. August. Nymph. EMM48:108-111]

On a grass bank [Freshwater West, Pembrokeshire. EMM88:22]

On Rhododendron [Hampstead Heath. PTSLENHS1949-50:36-38]

Under *Ononis/Erodium* on sand dunes [Harlech, Merionethshire. August/September 1946. EMM83:95]

Amongst low vegetation and sunning on heather [Hartlebury Common LNR, Worcestershire. EMM133:17-26]

Sweeping [In and around Newton Abbot, South Devon. August 1937. Adults. EMM74:20-21]

On *Erodium cicutarium* on sand dunes [Isles of Scilly. August. EMM102:67-69]

On Rhododendron [Ken Wood, Hampstead Heath, Middlesex. October 1949. LondonHets]

Feeding on greenfly and other pests of plum and damson [Kent. PTSLENHS1962:123-183]

On sea shore [Kilcoole, Co Wicklow. IrelandHets]

In Ballast Pit [Killarney, North Kerry. July 1927. IrelandHets]

In salt marsh [Lough Hyne, West Cork. IrelandHets]

Sweeping [Montgomery Canal, VC40. HN7:16]

Sweeping [Mount Brandon, Co Kilkenny. Adults and nymphs. IrelandHets]

On furze [Murrough of Wicklow. August 1927. Adult and nymph. IrelandHets]

On a dead thistle [Oulton Broad, Suffolk. September. SuffolkHets]

On Dewberry (*Rubus caesius*) in a forest [Pembrey Forest, Carmarthenshire. August 1961. EMM97:2001

In dry spots [Pembrokeshire. Ent60:283-284]

On mulleins (*Verbascum thapsus*) in a beech plantation [Pitchcombe, Gloucestershire. Adults and nymphs. EMM53:116-122]

From broom [Redstone, Reigate, Surrey. LondonHets]

Sandhills [Rock, Cornwall. 1919. CornwallHets]

On tree-mallow [Scilly Isles. 1888. EMM25:237-238]

In gravel pits, on embankments and in sandy places on the coast [South of Ireland. April to September. IrelandHets]

On Prunus [Sussex. Butler1923]

In a garden [Warwickshire. HN7:11]

From a derelict, metalliferous mine site [Wheal Johnny, Kehelland, near Camborne, West Cornwall. 1994/95. BJENH9:111-115]

In sand dunes [Whiteford Burrows, Gower coast, South Wales. 1960/1961. Ent100:157-165] On *Erodium* [Witley Common, Surrey. 1957/1958. Ent92:6-13]

Dyroderes umbraculatus (Fabricius) (Pentatomidae)

Sweeping mixed hedgerow vegetation [Perivale Wood LNR, Middlesex. 29 June 2013. BJENH27:13-19]

Eurydema dominulus (Scopoli) (Pentatomidae)

In a heap of wood chips and shavings of Spanish chestnut in a wood [Oaken Wood, East Malling, Kent. 12 January 1941. Males and females. EMM77:40]

In a garden [Weymouth, Dorset. 1 April 1997. EMM136:52]

At the roots of *Cardamine pratensis* in a wood. Incubated with *Alliaria petiolata*. The resulting eggs were not laid on the plant. The hatched nymphs were reared to adult, and were seen to feed on all parts of the plants, but particularly on the fruits [East Malling, Kent. 11 April 1959. EMM95:287-288]

Beating hawthorn flower in a garden [Saw-Pits Lane, Oaken Wood, Barming, Kent. 17 May 1940. Male. EMM76:256]

Sweeping mixed herbage [Near Saw-Pits Lane, Oaken Wood, Barming, Kent. 17 July 1940. Female. EMM76:256]

Sweeping a sheltered heathy woodland clearing [Holman Wood, Brede High Wood, East Sussex. 20 September 1992. BJENH10:1-2]

Indoors on curtain [Bromley, Kent. 13 October 1968. LondonHets]

On a gooseberry bush in an old garden [Alton, Hampshire. Butler1923]

On Umbellifers [Battle. Saunders1892]

On a strawberry bed [British Isles. June 1794. EMM61:253-257]

Umbelliferae [British Isles. EMM54:132-136]

On umbelliferous plants, in and about woods. Fell to the ground on any attempt being made to capture it [Doddington, Kent. Autumn 1895. EMM32:141]

On hawthorn in a garden [East Malling, Kent. April. EMM79:125]

In felled areas of chestnut plantations. When the chestnut 'bats' begin to grow again, the bug can be found associated with cuckoo-flower [Maidstone district. EMM79:125]

Sweeping Wood-Sage [Near Saw-Pits Lane, Oaken Wood, Barming, Kent. August 1940. EMM76:256]

On Arabis in a garden [West Malling, Kent. EMM79:125]

# Eurydema oleracea (Linnaeus) (Pentatomidae)

On Alliaria petiolata [Bristol Downs, Bristol, VC34. 19 April 2007. HN11:11]

Associated with Sea Radish (*Raphanus raphanistrum maritimus*) on cliff tops [Gordon's Steps, Boscombe, VC11. 25 April 2004. Both white and red spotted forms. ERJV117:221-227]

On Sisymbrium alliaria [Goring, Oxfordshire. 22 April 1945. Adults in copula. EMM81:275]

Sweeping the edge of allotments [Lawrence Weston Moor, Bristol, VC34. 29 April 2007. HN11:11]

Sweeping very large stands of Garlic Mustard (*Alliaria petiolata*) on wasteland [Near Great Barrington, Gloucestershire. 1 May 2011. Red and white forms. HN17/18:21]

On black mustard [Poldhu Cove, Cornwall. 3 May 1999. Mating pair. CornwallHets]

On ground [Flitwick Plantation, Bedfordshire. 9 May 1948. EMM86:6-8]

On Sisymbrium Alliaria [Grounds of Reading University, Berkshire. 7 May 1945. Adults in copula. EMM81:275]

On *Cochlearia Armoracia* [St Patrick's Hall, Reading, Berkshire. 8 May 1945. Adults *in copula*. EMM81:275]

On horse-radish [Nonsuch Park, Cheam, Surrey. 16 May 1998. Mating pairs of cream and red spotted forms. BJENH13:246-247]

On *Alliaria officinalis* growing in a large sand-pit sheltered on all sides by beech woods. Three colour forms were seen. Most had white markings, 25% had the white replaced with red, two had orange markings. Pairs *in copula* were either of the same or different colour [Rotherfield Peppard, Oxon. 19 May 1940. EMM77:101-104]

On the outer foliage of *Armoracia* and sweeping mignonette (*Rededa lutea*) [Woolwich Common, West Kent. 17 May 1992. Adults. ERJV106:30]

Brushed off hoary pepperwort (*Cardaria draba*) [Woolwich Common, West Kent. 19 May 1999. ERJV111:204]

Sweeping clumps of *Alliaria petiolata* in the open [Grounds of the Pest Infestation Laboratory, Slough. 21 May 1951. LondonHets]

Sweeping clumps of *Alliaria petiolata*. In culture, copulation occurred involving different colour forms. Eggs not laid on the foodplant but on the wooden sides/top of the cage. No eggs found on the plants in the grounds at this time. All the reared adults were of the white-marked form

[Grounds of the Pest Infestation Laboratory, Slough. 21 May 1951. Adults of white, yellow, orange and red forms. EG3:34-38]

In a garden [Hertford Heath, near Hertford. 21 May 1948. EMM84:264]

On sea radish [Kennack Sands, Cornwall. 23 May 2004. CornwallHets]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. 27 May 2005. HN5:7]

On *Alliaria petiolata* on a roadside [Booker, near High Wycombe, Buckinghamshire. 3 June 1951. EMM87:236]

Sweeping [Bristol Downs, Bristol, VC34. 5 June 2007. HN11:11]

From *Alliaria petiolata*. No eggs were found searching the plants [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. Adults. EG3:34-38]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

On and around Sea Radish (*Raphanus raphanistrum maritimus*) [Boscombe area, VC11. 7 June 2005. ERJV117:221-227]

Sweeping annual crucifer [Wickham Common, Hampshire. 7 June 2004. Red form. BJENH18:208]

On garlick mustard (*Alliaria petiolata*) [Bookham Common, Surrey. 20 June 1992. BJENH5:177-178]

Sweeping a bed of nettles and thistles in a derelict garden [Faversham, East Kent. 29 June 1902. EMM38:182]

Sweeping waste ground between sidings [Brentford Docks, Middlesex. 4 July 1951. Adult. LondonHets]

Swarming on clumps of *Alliaria petiolata*, feeding on the plant. Also found on the ground at the base of the plants, and running up and down adjacent grass shoots. No eggs were found searching the ground, stones and litter [Grounds of the Pest Infestation Laboratory, Slough. 2 July 1951. Nymphs. EG3:34-38]

Sunning itself on a rock in a garden [Bickley, Kent. 13 July 1946. EMM83:61]

On *Sisymbrium officinale* [Hounslow Heath, Middlesex. 14 July 1953. Adult and nymphs. Ent87:15-18]

On yellow crucifer [Whiteley, Hampshire. 19 July 2004. Nymphs reared in culture. BJENH18:208]

On and around dying *Alliaria petiolata* [Grounds of the Pest Infestation Laboratory, Slough. 30 July 1951. Adult and nymphs. EG3:34-38]

Sweeping crucifers [Hounslow Heath, Middlesex. 26 July 1953. Adult and nymphs. EMM89:303] In a weedy patch of farmland [Near Alderton, Gloucestershire. 31 July 2009. Nymph. HN16:12] On sea radish [Kennack Sands, Cornwall. 1 August 2002. CornwallHets]

On horseradish [Alongside the River Thames, near Greenwich, West Kent. 18 August 1993. Adult and nymph. ERJV106:30]

On a hillside [Kimmeridge, near Swanage, Dorset. 18 August 1947. EMM83:289]

On *Alliaria officinalis* growing in a large sand-pit sheltered on all sides by beech woods. The nymphs were observed feeding on seed pods and stems [Rotherfield Peppard, Oxon. 1 September 1940. Adult and nymphs. EMM77:101-104]

Sweeping dry grassland on a brownfield site [The Moors, Colchester, Essex. 2 September 2005. HN6:8]

In rank, mixed herbage [Ash Vale, Surrey. 10 September 1950. LondonHets]

On horseradish (*Armoracia rusticana*) and on a leaf of an adjacent *Polygonum persicaria* [Woolwich Common, West Kent. 8 September 1991. Nymphs reared in culture. ERJV104:79-80]

On horseradish (*Armoracia rusticana*) [Woolwich Common, West Kent. 11 September 1991. Nymphs. ERJV104:79-80]

At roots of herbage [Bostall Woods, West Kent. May 1952. ERJV104:79-80]

On swede [Brabourne, Kent. 1946. EMM82:219]

Feed on Jack-by-the-hedge, horse radish, wild radish and garlic mustard [Britain. S&L1959] Cliffs [Deal. EMM26:81-82]

Sweeping the flowers of *Pimpinella saxifraga* on sand-hills [Deal. September 1872. EMM9:192-193]

From sand dunes [Deal and Sandwich Bay. EMM82:275]

From cliffs [Dover. EMM82:275]

On *Raphanus raphanistrum* growing in the stubble of recently-cut barley [East Malling, Kent. September 1945. EMM82:275]

On *Alliaria officinalis* growing by a roadside. During sunny spells the bugs were easily seen sitting on the flowers and leaves, but in gentle rain they took shelter beneath the flowers and leaves or along the stems. In bright sunshine the adults were very active, running quickly up and down the stems and over the leaves. The slightest disturbance caused them to take to the wing, but they returned to the plant within 5-10 minutes [Goring Heath, Oxon. 1940. EMM77:101-104]

On or near *Alliaria petiolata* [Grounds of Pest Infestation Laboratory, Slough. June 1950. Adults. EMM87:103]

Found by sweeping to be generally distributed and not congregated on a particular plant [Grounds of the Pest Infestation Laboratory, Slough. August 1951. Adults. EG3:34-38]

In culture with *Alliaria petiolata*, fed upon all parts, but with a preference for the developing fruits [Grounds of the Pest Infestation Laboratory, Slough. EMM87:308]

On low plants, especially Cruciferae. It is especially partial to *Alliaria officinalis* [Kent. Adults and nymphs. EMM82:275]

On Thanet weed, cabbages and sweet rocket [Near Wye, Kent. 1946. EMM82:219]

In dead flower heads of sea carrot [Polurrian Cove, Cornwall. 2003. CornwallHets]

In Malaise traps in birch woodland [Silwood Park, Ascot. 1991. BJENH20:49-55]

Foodplants yellow rocket and white garlic mustard [Surrey. White, yellow and red marked forms. BJENH7:175]

Pairing on *Alliaria petiolata* in damp stream valleys of mixed deciduous woodland [VC12. HN9:13]

On horseradish [Woolwich Common, West Kent. June 1992. Nymphs. ERJV106:30]

# Eurydema ornata (Linnaeus) (Pentatomidae)

On *Salix* at the edge of a wood [Solom's Great Wood, Woodmansterne, Surrey. 17 April 2005. BJENH19:190]

On Sea Radish (*Raphanus raphanistrum maritimus*) on cliff tops [Gordon's Steps, Boscombe, VC11. 25 April 2004. ERJV117:221-227]

In a garden on *Erysimum* [Steyning, Sussex. 15 May 2007. HN23:8]

On Sea Radish (*Raphanus raphanistrum maritimus*) [Above Portman Ravine, Boscombe, VC11. 7 June 2005. Male. ERJV117:221-227]

MV light trap [Peacehaven, East Sussex. 13 October 2003. BJENH19:190]

On wallflower (*Cheiranthus allionii*) growing at the foot of chalk cliffs [Between Bonchurch and Ventnor, south coast of Isle of Wight. 20 October 2006. Including a teneral. ERJV118:279] Crawling on a rock [Tout Quarry, Isle of Portland, VC9. May 2005. ERJV117:221-227]

Evsarcoris aeneus (Scopoli) (Pentatomidae)

Sweeping a grassy ride [New Forest. 3 June 1934. EMM71:113-114]

Sweeping long grass at the junction of two woodland rides [Hawkhill Inclosure, near Brockenhurst, New Forest. 25 June 2011. Adult. Hem1:26]

Sweeping short grass and sparse leaf litter along the edge of a woodland path [Hawkhill Inclosure, near Brockenhurst, New Forest. 25 June 2011. Adults. Hem1:26]

Sweeping. Incubated with several plant species and became associated with *Hypericum pulchrum*. Feeding seen on the green seed pods of the plant [New Forest. 23 July 1950. Adult and nymphs. EMM87:172-173]

Sweeping short grass and sparse leaf litter along the edge of a woodland path [Hawkhill Inclosure, near Brockenhurst, New Forest. 16 August 2010. Adults. Hem1:26]

Sweeping rushes [New Forest, Hampshire. 25 August 1984. PTBENHS18:20]

Sweeping a rushy meadow [Bellowal, near Penzance, Cornwall. 1975. EMM111:228]

Sweeping in grassy places in young plantations [Lyndhurst, New Forest. July. EMM7:184-185]

Sweeping [New Forest, Hampshire. HantsHets]

Sweeping mature heather (*Calluna vulgaris*) in sunny, sheltered places amongst open scrub [New Forest, Hampshire. September 2003. Adults and nymph. BJENH18:208] Grassland [Wales. HN9:4]

Eysarcoris venustissimus (Schrank) (Pentatomidae)

In curled-up leaves of *Stachys sylvatica* and from dead stems of *Heracleum* [Puddlehill, Houghton Regis, Bedfordshire. 6 February 1945. EMM81:183-185]

Under a piece of sacking [Grounds of the Pest Infestation Laboratory, Slough. 14 April 1951. Adult. EMM87:201]

On ground ivy in a garden [Maidenhead, Berkshire. 5 May 1980. EMM116:132]

Sweeping [Grounds of the Pest Infestation Laboratory, Slough. 12 May 1951. Adults. EMM87:201]

On black horehound (*Ballota nigra*) and thistle in a park [Charlton, SE7. 19 May 1981. EMM119:62]

On Nettle (*Urtica dioica*) beside a river [Goole river at Tickhill, VC63. 20 May 2009. Adults. HN15:11]

On Stachys [Whippendell Wood, Hertfordshire. 24 May 1959. PTSLENHS1959:78-79]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. 27 May 2005. HN5:7]

Sweeping *Lamium album* and adjacent plants [North Weald, Essex. 29 May 1949. Adults, some *in copula*. EMM85:253]

On *Stachys sylvatica*, on the exposed upper side of the leaves and clustered in the folds of half-opened buds [Reigate district, Surrey. 29 May 1950. Including some paired. PTSLENHS1951-52:126-130]

On Stachys sylvatica [Reigate district, Surrey. 31 May 1950. PTSLENHS1951-52:126-130]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

On unopened flower spikes of *Stachys sylvatica* in a garden [Maidenhead, Berkshire. 4 June 1980. Breeding pairs. EMM116:132]

Deposited on the underside of terminal leaves and amongst the flower spikes of *Stachys sylvatica* [Reigate district, Surrey. 4 June 1950. Eggs. PTSLENHS1951-52:126-130]

In culture, of several species of Labiatae provided, the bugs preferred mint as food [Ringwood, Hampshire. 1 June 1946. Females. EMM83:59-61]

On the upper leaves of *Stachys sylvaticus*. In culture, eggs were laid mostly on the underside of leaves, but also on the upperside and a flower bud [Slough, Buckinghamshire. 3 June 1946. Males and females, one pair *in copula*. EMM85:193-206]

On hedge woundwort (*Stachys sylvatica*). Eggs laid on the underside of the lower side of the larger, lower leaves, with some under the smaller, upper leaves. [Whippendell Wood, near Watford, Hertfordshire. 5 June 1960. Including eggs. EMM97:27-29]

On the flower-spikes and leaves of a large clump of *Stachys sylvatica*, and adjoining nettles, on a south-facing slope. Eggs were observed being laid on the back of a leaf [Box Hill, Surrey. 6 June 1926. Including eggs and males and females *in copula*. EMM62:161-162]

Flying in the hot sun [Boxmoor, Hertfordshire. 7 June 1946. EMM85:79]

On *Stachys sylvatica* [Horsley, Surrey. 6 June 1903. Including male and female *in copula*. EMM62:161-162]

On wild strawberry. A few days later, when the *Stachys sylvatica* growing amongst it began to flower, the bugs transferred to this plant. Later still, eggs were seen on the under surface of the upper bracts, and in single cases on a calyx and on a lower leaf [Boxmoor, Hertfordshire. 12 June 1948. Adults, some *in copula*. EMM85:79]

On hedge woundwort [Stowe Wood, Cornwall. 12 June 2005. CornwallHets]

Sweeping [Ockham Common, Surrey. 18 June 1950. LondonHets]

Along the bank of a river, mainly clustered around the fruits of *Ranunculus acris*, but also on *Urtica dioica* and the spikes of *Stachys sylvatica*. Eggs found on *S. sylvatica*, but not the other plants. Eggs were laid underneath the leaves, and in one case within an empty calyx. In culture,

bugs fed on stems, veins of leaves and flowers of *S. sylvatica*, and the fruits of *R. acris* [Salisbury, Wiltshire. 18 June 1946. EMM83:175]

On stinging nettles [Northward Hill NNR, Kent. 25 June 1977. PTBENHS11:67-68]

On Stachys [Wisley, Surrey. 9 July 1905. LondonHets]

On *Stachys sylvatica* [Hillingdon, Middlesex. 8 August 1936. Nymphs reared in culture. Ent71:148-153]

Feeding on the nutlets of *Stachys sylvatica* in a wooded strip [Hounslow Heath, Middlesex. 8 August 1953. Nymphs. Ent87:15-18]

On deadly nightshade (*Atropa belladonna*) [Limmo Peninsula, VC18. 16 August 1984. Adults and nymphs. EMM127:38]

On Hedge Woundwort by a canal [Shropshire Union Canal at Minshull Vernon, VC58. 21 August 2005. HN6:14]

On Lamium album in a field [East Bergholt, Suffolk. 26 August 1952. Adults. EMM90:81-82]

Sweeping along a road verge [The Wolds, near Market Weighton, VC61. 29 August 2017. Hem5:38]

In hedgerows, on the dying infructescences of *Stachys*, and on intermingled plants of *Ballota nigra* [Boxmoor, Hertfordshire. 2 September 1948. Nymphs. EMM85:79]

Stachys sylvatica [Near Halstead, North Essex. 5 September 1948. EMM86:298]

In an old sand-pit feeding on the stem and young seed-pods of *Epilobium parviflorum* [Rotherfield Peppard, Oxon. 1 September 1940. EMM77:101-104]

On mugwort [Whelford Pools, Gloucestershire. 8 September 1991. GloucsHets]

On dead infructescences of *Stachys sylvatica* [Puddlehill, Houghton Regis, Bedfordshire. 23 September 1944. EMM81:183-185]

Adults in curled-up leaves of *Stachys sylvatica*; and nymph standing on a dead leaf [Puddlehill, Houghton Regis, Bedfordshire. 31 October 1944. Adults and nymph. EMM81:183-185]

On Stachys sylvatica along woodland paths [Bedfordshire. EMM85:79]

From an abandoned metalliferous mine site [Binner Downs, near Leedstown, West Cornwall. 1994-2007. BJENH21:205-214]

In woods [Boxhill, Surrey. LondonHets]

Under tidal debris [Brownsea Island, Poole Harbour, Dorset. 2006-2007. EG60:37-71]

On overblown plants of *Stachys sylvatica* by the side of a canal, clustered on the calyces [Crookham, Hampshire. August 1903. Nymphs. Butler1923]

Sweeping [Darenth Wood, Kent. June. D&S1865]

On Stachys sylvatica in a field [Flatford Mill Field Centre, Suffolk. Adults. EMM90:81-82]

Sweeping [Folkestone. June. EMM6:183]

Feeding on nettle [Gerrards Cross, Buckinghamshire. PTSLENHS1948-49:53]

On small clumps of vegetation [Grounds of Pest Infestation Laboratory, Slough. 1950. LondonHets]

Associated with *Stachys sylvatica*, *Urtica dioica* and *Lamium purpureum* [Grounds of Pest Infestation Laboratory, Slough. September 1950. Adults and nymphs. EMM87:103]

Sweeping *Stachys sylvatica* bearing fruits [Grounds of the Pest Infestation Laboratory, Slough. EMM87:308]

In a small copse [Marley, Sussex (near Haslemere, Surrey). 1944. EMM82:199-200]

Mainly on *Stachys sylvatica*, but also *Lamium album* and *Urtica dioica* [Near Halstead, North Essex. June/July 1950. Adult, nymph and egg. EMM86:298]

On Stachys sylvatica [Near Shinfield, Berkshire. June 1940. EMM77:101-104]

Sweeping *Stachys sylvatica* in a lane [Neighbourhood of Marlborough, Wiltshire. June 1960. EMM103:22]

Sweeping [New Forest. June 1917. EMM53:169-173]

On woundwort. In a garden [Peterborough district. EG20:125-135]

Under fallen herbage in the vicinity and among the roots and stem bases of *Stachys*. In dormant condition [Reigate district, Surrey. December 1950, January and March 1951. PTSLENHS1951-52:126-130]

In the flower-heads of *Stachys*, mainly sheltered within calyces of the flowers, where they resemble the ripening seeds [Reigate district, Surrey. End of June to October 1950. Nymphs. PTSLENHS1951-52:126-130]

Clustered together within the crumpled-up leaves of *Stachys* on the ground [Reigate district, Surrey. End of November 1950. Adults. PTSLENHS1951-52:126-130]

Moved from the withered *Stachys* to the fresher green of *Lamium* [Reigate district, Surrey. End of September 1950. PTSLENHS1951-52:126-130]

On Stachys sylvatica [Reigate, Surrey. Eggs and adults. PTSLENHS1951-52:10]

On *Stachys sylvatica*, moving to *Lamium album* in late summer [Reigate, Surrey and Chanctonbury, Sussex. 1950. EMM87:139]

Sweeping [Rothamsted Experimental Station, Harpenden. Males. TRESL112:173-220]

Heard to emit a song in culture [Rothamsted, Hertfordshire. April 1953. Males. EMM90:49-56]

On bastard balm (Melittis melissophyllum) in an old walled garden [Surrey. EMM116:122]

Mainly on dead-nettle [Thaxted, Essex. May 1949. EMM85:253]

Sweeping waste ground [Uxbridge, Middlesex. June 1950. Adults. EMM86:301]

On re-vegetated post-industrial sites containing rough, flower-rich grassland [VC63. 2010. HN16:13]

On Stachys sylvestris [Warnham, West Sussex. ERJV58:100-101]

# Jalla dumosa (Linnaeus) (Pentatomidae)

Beating Sea Buckthorn on sand dunes [Deal, Kent. July. Nymph. PTSLENHS1962:123-183]

# Mecidea lindbergi Wagner (Pentatomidae)

To MV light [Weymouth, Dorset. 16 July 2015. BJENH30:100]

MV light [Fareham, VC11. 18 December 2015. Atropos56:23-25]

Actinic light [Portchester, VC11. 19 December 2015. Atropos56:23-25]

In a garden moth-trap [Weymouth, VC9. 16 December 2015. Adult. Atropos56:23-25]

MV light [Weymouth, VC9. 19 December 2015. Atropos56:23-25]

Garage light [Exeter, VC3. 27 December 2015. Atropos56:23-25]

MV light [Exeter, VC3. 30 December 2015. Atropos56:23-25]

MV light [Fareham, VC11. 26 December 2015. Atropos56:23-25]

MV light [Walditch, VC9. 27 December 2015. Atropos56:23-25]

# Neottiglossa pusilla (Gmelin) (Pentatomidae)

Brownfield site [Crayford Stadium Rough, West Kent. 26 May 2006. BJENH20:193-194]

Sweeping a grassy ride [New Forest. 3 June 1934. EMM71:113-114]

Sweeping [Hither Green NR, Kent. 7 June 1996. BJENH10:177]

Sweeping acid grassland [Kenley Common, Surrey. 6 June 1996. BJENH10:176-177]

Sweeping along a woodland ride [Between Santon Warren and Two Mile Bottom, West Norfolk. 20 June 2019. Hem6:248]

Sweeping sorrel and heather/heath [Knettishall Heath Country Park, West Suffolk. 19 June 2019. Hem6:247]

Sweeping an area dominated by sorrel and heather/heath [Rampart Field, near Lackford, West Suffolk. 18 June 2019. Hem6:247]

Sweeping along a woodland ride [Two Mile Bottom, West Norfolk. 17 June 2019. Hem6:247]

Sweeping areas of sorrel and heather/heath amid a dirt-bike track, and mixed vegetation at the perimeter [Near Thetford, West Norfolk. 21 June 2019. Hem6:248]

Sweeping a track through woodland and clearing [Near Two Mile Bottom, West Norfolk. 21 June 2019. Hem6:248]

Sweeping [Hither Green NR, Kent. 27 June 1996. BJENH10:177]

Sweeping honeysuckle [Hengistbury Head, Hampshire. 12 July 1922. EMM58:231]

In sandy grassland [Llandrindod Wells, VC43. 15 July 2015. Adult. HN23:4]

At the roots or on ling [Oxshott Heath and Esher Common. 12 July 1952. PTSLENHS1952-53:83-84]

Maritime grassland [Pencannow Point, Crackington Haven, Cornwall. 12 July 1989. CornwallHets]

In grass and *Trifolium dubium* in chalk pit [Harefield, Middlesex. 10 August 1933. Nymphs reared in culture. Ent71:148-153]

Sweeping fine, dry, long grass on an artificial mound covering a water-tank in a wood [Albury, Surrey. 15 August 1899. Butler1923]

Chalk pit [Harefield, Middlesex. 15 August 1933. Adults. LondonHets]

Sweeping [Hither Green NR, Kent. 22 August 1996. BJENH10:177]

Sweeping [Baddesley Common, Warwickshire. 26 August 2005. HN7:11]

On *Ulex* [Reigate, Surrey. 26 August 1949. EMM87:139]

Sweeping grassy brownfield site of derelict wharf [River Medway, Rochester. 1 September 2004. BJENH18:209]

Sweeping [Wisley, Surrey. 2 September 1906. LondonHets]

On Festuca in a chalk pit [Harefield, Middlesex. 8 September 1934. Female. LondonHets]

On grass [Lemar, Cornwall. 6 September 2001. CornwallHets]

On *Agrostis* in a chalk pit [Harefield, Middlesex. 12 September 1934. Male. LondonHets]

In regenerating clear-fell on south-facing slope [Paradys Wen, Gwernargllwydd, VC43. 29 October 2015. Adult. HN23:4]

Parasitised by the tachinid *Alophora obesa* [Banstead Down, Surrey. June 1961. Adult. EMM99:35]

Sweeping [Banstead Downs, Surrey. LondonHets]

Sweeping [Broad Oak, East Sussex. July 1936. EMM72:258-259]

Sweeping [Bromley. Saunders1892]

In chalk pit [Darenth. LondonHets]

From post-industrial sites [Dearne Valley, VC63. 2008. HN13:11]

On a railway bank [Folkestone. June. EMM6:183]

From a rough meadow [Marley, Sussex (near Haslemere, Surrey). 1940-45. EMM82:199-200]

In uncut, ungrazed, herb-rich, sandy grassland [Maulden Wood, Bedfordshire. 1996. EMM133:261-262]

Sweeping *Teucrium scorodonia* [Near Covehithe, Suffolk. September 1910. Nymphs. SuffolkHetsAnn]

Sweeping at dusk [Peterborough district. EG20:125-135]

Sweeping [Shirley, Mickleham & Darenth. May. EMM7:184-185]

Bred Asolcus waloffae (Hymenoptera) from eggs [Silwood Park, Berkshire. TRESL120:417-436]

On re-vegetated post-industrial sites containing rough, flower-rich grassland [VC63. 2010. HN16:13]

From post-industrial site [Worsborough, VC63. 2007. HN13:11]

# Nezara viridula (Linnaeus) (Pentatomidae)

Sweeping herbage beside an old track at a post-industrial site [Near Stanford-le-Hope, VC18. 12 August 2008. Nymph. HN12:16]

On Runner Beans in a garden [Staines, VC21. 20 August 2009. Nymphs. HN14:9]

On tomato plants in a garden. Observed feeding on unripe tomatoes. The garden had nothing brought into it from outside (garden centres, *etc.*) [Kingswood Avenue, Queens Park, London, VC21. 23 August 2003. Nymphs, maturing after capture. ERJV116:55-58]

Sweeping herbage beside an old track at a post-industrial site [Near Stanford-le-Hope, VC18. 23 August 2008. Nymphs reared in culture. HN12:16]

On runner beans in a garden [Staines, Middlesex. 25 August 2007. Nymphs. HN12:17]

On runner beans in a garden [Staines, Middlesex. 1 September 2007. Nymph. HN12:17]

On bramble (*Rubus*) and stinging nettle (*Urtica dioica*). Nymphs fed on green tomatoes in culture [Isleworth, Middlesex. 9 September 2005. Adult and nymphs. BJENH19:190]

Sweeping herbage beside an old track at a post-industrial site [Near Stanford-le-Hope, VC18. 8 September 2008. Nymph. HN12:16]

On runner beans in a garden [Staines, Middlesex. 8 September 2008. Nymphs. HN12:17]

Feeding on small bushes of Wayfaring tree (*Viburnum lantana*) [Camley Street Natural Park, near King's Cross Station, London. 22 September 2003. Nymphs. BJENH17:143-146]

In an urban park [Warwick Gardens, Peckham Rye, VC17. 22 September 2011. Adults. HN17/18:5]

At a brownfield site [Stratford, VC18. 21 October 2003. Nymph. HN12:16]

On Golden Rod, Hemp Agrimony and other plants [Camley Street Nature Reserve, Kings Cross, London. HN4:1]

On runner beans in an allotment [Sheets Heath, Brookwood, Surrey. Nymphs. BJENH18:123]

On leaves of potato plants in allotment garden [St Thomas Abbey Garden, Dublin. August 2017. Nymphs. BJENH31:142-146]

On runner beans in a garden [Staines, Middlesex. 25 July 2008. Stage not stated. HN12:17]

Feeding on the stems and leaves of runner beans in a garden [Staines, Middlesex. August 2006. Adults and nymphs. HN12:17]

Feeding on tomatoes in a garden [Summerfield Avenue, Queen's Park, London. Nymphs. BJENH17:143-146]

In a garden [Summerfield Avenue, Queens Park, London, VC21. August 2003. ERJV116:55-58]

# Palomena prasina (Linnaeus) (Pentatomidae)

Sunning on a fence in a garden [England. 13 February 2001. Brown form. BJENH14:232]

On valerian on the first warm days [Warwickshire. 26 March 2003. HN7:11]

In a garden [Burford, VC23. 19 April 2007. HN9:13]

On hawthorn [Bagley Wood, near Oxford, VC22. 28 April 1893. EMM29:191-192]

Under a tree [Banstead Wood, Surrey. 13 May 1951. LondonHets]

On roadside herbage [Daneway, Gloucestershire. 16 May 1954. EMM91:264]

On ivy [Torquay. 25 May 1907. Dark olive form. Ent48:173]

On hawthorn [Littledean Walk, Gloucestershire. 1 June 1991. GloucsHets]

On Rubus idaeus [Trawscoed, Cardiganshire. 3 June 1950. Male and females. EMM92:54-64]

On Betula [Sherwood Forest. 7 June 1932. EMM68:213-214]

Sweeping/beating along woodland rides and in clearings [The Chase, Broad Layings, VC12. 15 June 2015. Hem3:53]

Beating scrub oak [Riddlesdown, Surrey. 20 June 1953. Adult. LondonHets]

Flying round a broom bush (*Cytisus scoparius*) on sand-hills [Culbin sand-hills, Moray Firth. 21 June 1951. Adult. EMM87:255]

On cherry tree in a garden [Fiddler's Elbow, Monmouthshire. 24 June 1944. EMM91:143]

Grasped by the spider Segestria florentina [Kent. 21 June 2015. Adult. BJENH29:35-36]

On Betula [Potter Hanworth, Lincolnshire. 25 June 1932. EMM68:213-214]

In an old Brassica seedbed overgrown with weeds [Starcross, South Devon. 5 July 1944. Ent88:89-91]

Feeding on the white part of fresh bird droppings on wooden fence posts along a woodland margin [Wokingham, Berkshire. 8 July 2007. Nymph. BJENH26:145-147]

On Verbascum thapsus [Cornwall. 11 July. Adult pairs. ERJV42:49-51]

On umbellifers and off bramble [Along the Mineral Line at Baddesley Ensor, Warwickshire. 8 August 2001. HN7:11]

Beating blackcurrents [Long Ashton Research Station, Bristol. 7 August 1967. Nymphs. Ent101:202-204]

Sweeping thistles [Bookham Common, Surrey. 15 August 1953. Nymphs. LondonHets]

From nettles [Grounds of the Pest Infestation Laboratory, Slough. 17 August 1951. Nymphs. EMM87:274]

Beating blackcurrents [Long Ashton Research Station, Bristol. 16 August 1967. Nymph. Ent101:202-204]

From Lawson's Cypress (*Chamaecyparis lawsoniana*) [Royal Leamington Spa Cemetery, Warwickshire. 18 August 2015. Nymphs reared in culture. Hem3:126]

On ivy [Boxhill, Surrey. 29 August 1896. LondonHets]

On ivy [Boxhill, Surrey. 31 August 1898. LondonHets]

Sweeping [Houghton, Sussex. 27 August 1932. Nymph. EMM69:21]

Sweeping/beating at the edge of a wood [Hoyle's Mouth, Penally, Pembrokeshire. 27 August 1951. EMM88:22]

Feeding on *Matricaria Chamomilla* L. [Messack, St Just-in-Roseland, Cornwall. 5 September 1945. Adult. EMM82:42]

Shaking *Chamaecyparis lawsoniana* 'Erecta Viridis' in a garden [Pershore, Worcestershire. 4 September 2004. Nymph. EMM142:52]

Sweeping [Mounton, Chepstow, Monmouthshire. 9 September 1944. EMM91:143]

On birches [New Forest. 10 September 1934. EMM71:113-114]

On birch [Ham Street, Kent. 11 September 1966. Adults and nymphs. PTSLENHS1967:24-26]

Beating pine [Lund Ridge, North York Moors, North-east Yorkshire. 13 September 2019. Hem6:266]

On hazel [Roughan Crag, Kilnaboy, Co Clare. 22 September 1960. Male. EG12:77-79]

On the flowers/seeds of a thicket of Stinging Nettle, 265m OD [Above Elmley Castle on slopes of Bredon Hill, VC37. 30 September 2007. HN10:11]

In a garden [Warwickshire. 28 September 2001. HN7:11]

Sunning on a leaf of *Geranium pratense* [Little Comberton. 17 October 1992. HSGN12:10]

Beating oak bushes growing on a hillside. Bugs were olive-green or bronze, all becoming bronze within a week in culture [Near Ipsden, Oxfordshire. 20 October 1940. EMM77:101-104]

Beating a larch at the edge of a wood [Rowney Warren, Shefford, Bedfordshire. 31 October 1993. Brown winter form. EMM131:159-161]

Partly enfolded in a dead brown valerian leaf on the plant [Warwickshire. 21 November 2005. Adult. HN7:11]

In a Rothamsted light trap [Rhandirmwyn, near Llandovery, Dyfed. 28 November 1979. Brown winter form. EMM131:159-161]

On birch [Assington Thicks, Suffolk. SuffolkHets]

On poplar [Bentley Woods, Suffolk. SuffolkHets]

From an abandoned metalliferous mine site [Binner Downs, near Leedstown, West Cornwall. 1994-2007. BJENH21:205-214]

At sugar on an old pear-tree [Birkenhall, Somerset. ERJV63:50-51]

Beating ivy [Blackheath, Kent. 1901. LondonHets]

On nettles of hedgerow [Bodigga Cliff, Cornwall. 1979. CornwallHets]

From various deciduous trees and shrubs, hazel, beans and lucerne [Britain. S&L1959]

In a garden on the stem of a marigold [Broad Oak, East Sussex. July 1936. EMM72:258-259]

Beating ivy [Bromley, Kent. Nymphs reared in culture. LondonHets]

From birch [Burnham Beeches, Buckinghamshire. August 1950. EMM86:301]

From flood debris. Bronze-coloured form [Chagford, Devon. December 1937. Male and females. EMM77:101-104]

On Privet (*Ligustrum vulgare*) [Clandon, Surrey. LondonHets]

Woods [Cookstown River, Enniskerry, Co Wicklow. September 1931. IrelandHets]

From post-industrial sites [Dearne Valley, VC63. 2008. HN13:11]

On raspberries [Devon. Saunders1892]

On leaf of Verbascum [Duncliffe Wood, Dorset. Spring 1950. EMM87:139]

Sunning on the wall of a house [Evesham, Worcestershire. October 2006. Nymphs. EMM144:163-176]

In the gizzard of a Great Tit [Forest of Dean, Gloucestershire. 1948-1951. Adult. EMM92:68-71] In gardens [Gloucester district. EMM91:264]

In culture with *Crataegus*, fed mostly on the unripe fruits [Grounds of the Pest Infestation Laboratory, Slough. Nymphs. EMM87:308]

On flowers in a house [Hampstead. March 1999. Green summer colouration. BJENH12:244]

Sunning on oak leaves [Hartlebury Common LNR, Worcestershire. EMM133:17-26]

Beating young hazel. Reared to adult in culture [Haven Street, Isle of Wight. Nymphs. EMM60:117-118]

In a milk bottle under a hawthorn hedge [Little Comberton, Worcestershire. December 2004. Dead specimen. EMM143:1-6]

In a garden [Maidenhead, Berkshire. EMM134:43]

On birch [Mickleham, Surrey. August 1952. LondonHets]

Sweeping [Montgomery Canal, VC40. HN7:16]

Beating hazels in hedges [Near Tring. September 1899. EMM35:270]

In a garden [Oxford. EMM139:96]

On Dewberry (*Rubus caesius*) in a forest [Pembrey Forest, Carmarthenshire. August 1961. EMM97:200]

Breeding on both Sea Buckthorn (*Hippophae rhamnoides*) and cultivated Bladder Senna (*Colutea arborescens*) [River Mersey waterfront, Otterspool, Liverpool, VC59. Nymphs. EMM143:137-140]

Bred *Asolcus davatchii* (Hymenoptera) from eggs [Silwood Park, Berkshire. June 1964. TRESL120:417-436]

In a garden on a variety of plants, including valerian, buddleia and marjoram [Warwickshire. 2003-2004. HN7:11]

On Red Valerian (*Centranthus ruber*) [Warwickshire. September 2002. Including a nymph. HN7:11]

From a derelict, metalliferous mine site [Wheal Johnny, Kehelland, near Camborne, West Cornwall. 1994/95. BJENH9:111-115]

On birch [Witley Common, Surrey. 1957/1958. Ent92:6-13]

On firs [Yarmouth. Butler1923]

# Pentatoma rufipes (Linnaeus) (Pentatomidae)

Frozen out of the high crown of elm (*Ulmus procera*). One dead, one revived on the recorder's hand [Wick, Worcestershire. 11 January 2010. Nymphs. EMM146:62]

Sweeping *Mercurialis perennis* in a wood [Fancott, Bedfordshire. 9 April 1945. Adults. EMM81:111]

Beating *Quercus petraea* [Penparcau, Cardiganshire. 9 April 1955. Nymphs. EMM92:54-64] On ash [Near Exton, Rutland. 14 May 1932. EMM68:213-214]

On hawthorn. Incubated with a twig of hawthorn and a well grown Orthosid larva from the same bush. The Orthosid ate the bug [Epping Forest. 15 June 1912. Nymph. EMM48:239-240]

On post [Washer's Wood, Bedfordshire. 14 June 1942. EMM86:6-8]

Nymphs seen leaving the leaves of oak/birch before the final moult and taking shelter under loose bark or in cracks [Reading district. 20 June 1940. Adults and nymphs. EMM77:101-104]

From Birch (*Betula*) [University Parks, Oxford, Oxfordshire. 30 June 2016. Nymphs reared in culture. Hem4:126]

On beeches [Brockenhurst. 2 July 1950. PTSLENHS1950-51:71-72]

From Larch (*Larix*) [Cowleaze Wood, Chiltern Hills, Oxfordshire. 4 July 2016. Nymphs reared in culture. Hem4:126]

On tent [Inchcailloch, Loch Lomond NNR, Stirlingshire. 5 July 1967. EMM114:21-24]

From Aspen (*Populus tremula*) [New Marston Meadows, Oxford, Oxfordshire. 2 July 2015. Nymphs reared in culture. Hem3:126]

On sallow in chalk-pit [Sewell, near Houghton Regis, Bedfordshire. 5 July 1944. EMM81:183-185]

From Larch (*Larix*) [Wooton, Oxfordshire. 5 July 2016. Nymphs reared in culture. Hem4:126] On oak on canal bank [Byfleet, Surrey. 8 July 1950. LondonHets]

From Scots Pine (*Pinus sylvaticus*) [Cothill, VC22. 7 July 2016. Nymphs reared in culture. Hem4:126]

Sweeping in a field [Headley Lane, Surrey. 8 July 1903. Nymph. LondonHets]

Sweeping birch. In culture, seen to feed on the stem of a birch leaf [Hengistbury Head, Hampshire. 7 July 1922. Nymphs. EMM58:210-211]

From Hawthorn (*Crataegus*) on a hillside meadow [Stonesfield, Oxfordshire. 8 July 2015. Nymphs reared in culture. Hem3:126]

Feeding on the white part of fresh bird droppings on wooden fence posts along a woodland margin [Wokingham, Berkshire. 8 July 2007. Nymph. BJENH26:145-147]

From Sycamore (*Acer pseudoplatanus*) [Yarnton, Oxfordshire. 10 July 2015. Nymphs reared in culture. Hem3:126]

To electric light [Aberystwyth, Cardiganshire. 19 July 1955. Female. EMM92:54-64]

Beating Quercus petraea [Derwenlas, Montgomeryshire. 20 July 1955. Female. EMM92:54-64]

Beating a tangle of vegetation [Grounds of the Pest Infestation Laboratory, Slough. 20 July 1951. Adult and nymph. EMM87:274]

Sweeping/beating along woodland rides and in clearings [The Chase, Broad Layings, VC12. 17 July 2015. Hem3:54]

Mating on the exposed trunks below the tree canopy of a group of Japanese Maple trees (*Acer palmatum*) in the evening after dark [Near railway station, Botley Road, Oxford. 24 July 2010. Adult pairs. BJENH29:40]

On alder [Cannop Brook, Gloucestershire. 29 July 1984. GloucsHets]

Floating alive near loch shore [Inchcailloch, Loch Lomond NNR, Stirlingshire. 31 July 1966. EMM114:21-24]

Mating on the exposed trunks below the tree canopy of a group of Japanese Maple trees (*Acer palmatum*) in the evening after dark [Near railway station, Botley Road, Oxford. 29 July 2011. Adult pairs. BJENH29:40]

In flight below oaks [Inchcailloch, Loch Lomond NNR, Stirlingshire. 2 August 1967. EMM114:21-24]

Eggs laid in sleeves on a cherry tree [Wye. 11 August. Eggs and nymphs. EMM81:86-87]

On post [Woodcock Wood, Fancott, Bedfordshire. 20 August 1948. EMM86:6-8]

Attached to an oak leaf. Hatched in culture in September [New Forest. 24 August 1917. Eggs. EMM58:152-156]

In forestry plantation [Templenoe, Co Kerry. 25 August 2007. HN10:13]

To mercury-vapour light trap [Trawscoed, Cardiganshire. 22-23 August 1955. Males. EMM92:54-64]

On mudflats [Caerlaverock NNR, Solway Firth, Dumfriesshire. 26 August 1970/28 August 1968. EMM109:60]

On Malva sylvestris [Pertenhall Church, Bedfordshire. 29 August 1945. EMM86:6-8]

From potatoes [Long Ashton Research Station. 4 September 1967. Female. EMM109:132-139]

On oak [Byfleet, Surrey. 8 September 1935. LondonHets]

On paling [Chesham Park, Buckinghamshire. 12 September 1896. LondonHets]

On path [Putney, Surrey. 15 September 1920. LondonHets]

At shop window [South Kensington, Middlesex. 14 September 1962. LondonHets]

Sweeping in a bog [Churchhill, Lough Neagh. 19 September 1894. EMM31:33-35]

At MV trap [Freshwater, Isle of Wight. 18 September 1992. BJENH6:77]

On oak [Mitcham Common, Surrey. 27 September 1983. LondonHets]

On a Brewer's Spruce (*Picea breweriana*) [Little Comberton, Worcestershire. 2 October 2008. EMM145:171]

Frozen out of a *Sequoiadendron giganteum* in a garden [Little Comberton, Worcestershire. 18-19 December 2010. Nymph. EMM147:105-110]

Crawling up the trunk of a beech tree [Marley, Sussex (near Haslemere, Surrey). 30 December 1943. EMM82:199-200]

In garden [Angarrack, Cornwall. 1990-2004. CornwallHets]

In a dead hawk [Bentley and Raydon Woods, Suffolk. August. SuffolkHets]

In conifer [Berkhamsted, Hertfordshire, Nymph, LondonHets]

At sugar on an old pear-tree [Birkenhall, Somerset. ERJV63:50-51]

Garden [Bodmin, Cornwall. CornwallHets]

At MV light [Carshalton, Surrey. Adult. LondonHets]

Injurious to young apple trees [Co Kilkenny. IrelandHets]

On or near oak [Cumberland. 1916. EMM53:112-113]

On pines (*Pinus sylvestris*) [Dinnet Moor, Braemar, Aberdeenshire. July 1970. EMM107:172-173]

In a wood [Dinnet Oak Wood, Braemar, Aberdeenshire. July 1970. EMM107:172-173]

On oak [Epping Forest, Essex. LondonHets]

In the gizzards of a Great Tit, Blue Tits, Coal Tits and a Marsh Tit [Forest of Dean, Gloucestershire. 1948-1951. Nymphs. EMM92:68-71]

On seeding Angelica flower-head [Foxhall, Suffolk. SuffolkHets]

On oaks [Glen Moriston, Inverness-shire. July 1937. EMM74:89-90]

On birch and crab-apple, and amongst heather [Hartlebury Common LNR, Worcestershire. EMM133:17-26]

On birch [Isle of Raasay, Scotland. EMM83:76]

On oaks [Isle of Wight. August 1926. EMM63:41-42]

On cherry [Kent. PTSLENHS1962:123-183]

On Achillea millefolium [Killarney National Park, Co Kerry. August 2007. HN10:13]

On various trees and shrubs [Kinloch, Isle of Rhum. 1960-1962. TSBE18:91-167]

In woods [Kinloch, Isle of Rhum, Scotland. Pair in copula. EMM83:76]

In woodland [Kinlock woodlands, Isle of Rhum. September 1969. EMM105:213]

Beating Rhododendron [Kintoch woodlands, Isle of Rhum. 1960. Nymph. EMM97:199-200]

On the foreshore [Kintoch, Isle of Rhum. 1961. Adult. EMM97:199-200]

Sweeping bog grasses along the shore of a loch [Loch Scresort, Isle of Rhum. July 1969. Nymphs. EMM106:31]

Crawling on a pavement [London. Butler1923]

In a garden [Maidenhead, Berkshire. EMM134:43]

On a horse-chestnut leaf [Merioneth. August/September 1927. Eggs and newly emerged nymphs. EMM64:62-64]

On oak [Merioneth. August/September 1927. Nymphs. EMM64:62-64]

On a beach [Mull of Kintyre. EMM105:213]

Under bark and crawling up trunks in an orchard of cherry, apple and plum [Near Sittingbourne, Kent. Beginning of May. Nymphs. EMM81:86-87]

Under loose bark in an orchard of cherry, apple and plum [Near Sittingbourne, Kent. Early February. Nymphs. EMM81:86-87]

On trees in an orchard of cherry, apple and plum; and in an adjacent garden on hops. Seen crawling down branches and trunks, and found under loose bark. *Nabis lativentris* seen feeding on a nymph [Near Sittingbourne, Kent. End of September. Nymphs. EMM81:86-87]

Adults flying freely in the sun and on cherry, apple and plum in an orchard. Nymphs mostly in the clusters of cherry fruits. Adults and nymphs emitted a strong smell [Near Sittingbourne, Kent. July 1943. Adults and nymphs. EMM81:86-87]

On trees [New Forest. August 1898. EMM35:112-114]

Beating oaks [New Forest. July 1904. ERJV17:67]

Beating oak [New Forest. June 1917. Nymphs. EMM53:169-173]

On oak [Nutberry, Dumfriesshire. Autumn. EMM70:162]

On oak and sallow [Oxshott, Surrey. LondonHets]

Beating trees and on grass tussocks in a bog [Papadil, Isle of Rhum. September 1969. EMM105:213]

Sweeping bog grasses [Papadil, Isle of Rhum. September 1969. Nymph. EMM105:213]

On rocky beaches [Pembrokeshire. 1948-1949. EMM92:54-64]

Crawling on wet sand on the coast [Pembrokeshire. Ent60:283-284]

On oak and birch [Reading district. 1940. EMM77:101-104]

At light [Rothamsted Experimental Station, Harpenden. Males. TRESL112:173-220]

Beating oak [Shooter's Hill, Blackheath, Kent. 1904. LondonHets]

In Malaise traps in birch woodland [Silwood Park, Ascot. 1991. BJENH20:49-55]

From Betula pubescens/pendula [Skipwith Common, VC61. 1981/82. EcolEnt10:159-169]

In a light trap [Somerset. ERJV64:293-294]

In a garden [Warwickshire. HN7:11]

Peribalus strictus (Fabricius) (Pentatomidae)

Beating white poplar [Bentley Woods, Suffolk. 25 May 1901. SuffolkHets]

Sweeping mixed herbage in an oak wood [Church Woods, Blean, Kent. 27 May 1950. Female. EMM86:224]

Sweeping a rough grassy glade in an abandoned orchard [Loch's Heath, South Hampshire. 29 May 2007. Adult male. BJENH20:269]

Sweeping in reed-bed [Henfield Common, West Sussex. 14 July 2018. BJENH32:142]

On hazel [Slindon Woods, Sussex. 13 September 1899. EMM36:132]

Under brambles at base of concrete wall on derelict site of old power station [Broomsgrove, Hastings, VC14. 22 September 2003. Adult. HN4:5]

From a Rothamsted-type light trap [Rhandirmwyn, Carmarthenshire. 28 November 1979. HSGN3:9]

Beating/sweeping among trees [England. S&L1959]

In woods [Kent. S&L1959]

Sweeping [Near Totnes, South Devon. Whitsuntide 1915. EMM51:220]

Picromerus bidens (Linnaeus) (Pentatomidae)

Feeding on larva of moth *Zygaena* [Esher Common, Surrey. 24 June 1952. Nymph reared in culture. LondonHets]

On the underside of a leaflet of Hogweed (*Heracleum sphondylium*) in the bottom of a chalk valley [Below Devilsden Wood, Coulsdon, Surrey. 3 July 1954. Nymphs reared in culture. EMM92:651

Beating heather (*Calluna vulgaris*) [Burnt Platt Wood, Oxfordshire Chilterns. 20 July 2015. BJENH29:43-44]

From Heather (*Calluna vulgaris*) [Burnt Platt Wood, Stoke Row, Oxfordshire. 20 July 2015. Nymphs reared in culture. Hem3:126]

In a lively struggle with the moth *Leucania impudens* amongst heather. The rostrum was inserted deeply amongst the scales of the anal tuft and between the vulvae [Ringwood, Hampshire. 16 July 1940. Nymph. Ent74:71]

From Birch (*Betula*) [The Chase, Broad Layings, Hampshire. 17 July 2015. Nymphs reared in culture. Hem3:126]

Sweeping/beating along woodland rides and in clearings [The Chase, Broad Layings, VC12. 17 July 2015. Hem3:54]

Canal bank [Byfleet, Surrey. 23 July 1904. Nymph reared in culture. LondonHets]

On the back of a Drinker moth sucking the abdomen [St Margaret's Bay. 30 July 1927. Nymph. Ent60:235]

On herbage in marsh [Flitwick Moor, Bedfordshire. 13 August 1944. EMM81:183-185]

On *Armoracia rusticana* and *Calystegia sepium* [Grounds of Imperial College Biological Field Station, Slough. 15 August 1933. LondonHets]

On Betula and Salix [Uxbridge, Middlesex. 11 August 1933. Ent71:148-153]

On birch [Epping Forest, Essex. 18 August 1932. LondonHets]

Feeding on a larva of *Macrothylacia rubi* [Ockham, Surrey. 20 August 1967. PTSLENHS1967:120-121]

On mixed herbage growing on the face of a cliff. In culture, was seen to feed on a long-horned grasshopper (*Leptophyes punctatissima*) taken with it [Between Lye Rock and Bossiney Cove, North Cornwall. 22 August 1948. Female. EMM85:84]

On heather [Esher Common, Surrey. 28 August 1950. LondonHets]

At MV light [Hankley Common, Surrey. 29 August 1984. PTBENHS18:20]

Predating larva of Marsh Fritillary (*Euphydryas aurinia*). The shieldbug breaks into the web, extracts a larva and feeds on it in the open, the larva being impaled on the end of its rostrum [Seil Island, Argyll & Bute. 28 August 2005. Adult. Atropos26:59]

In a marsh, from the leaves of *Iris pseudocorus* [Wolvercote, Oxford. 28 August 1956. Adults. EMM93:10]

Beating juniper [Riddlesdown, Surrey. 4 September 1954. PTSLENHS1954-55:93-94]

On ruderal vegetation beside a pond [Minety Common, VC7. 6 September 2011. Adult. Hem6:264]

On birches [New Forest. 10 September 1934. EMM71:113-114]

On *Armoracia rusticana* and *Calystegia sepium* [Grounds of Imperial College Biological Field station, Slough. 11 September 1934. LondonHets]

On *Armoracia rusticana* and *Calystegia sepium* [Grounds of Imperial College Biological Field station, Slough. 12 September 1934. LondonHets]

On the base of a dead grass stem [Imperial College Biological Field Station, Slough. 14 September 1934. Egg batch. TSBE2:47-67]

Feeding on larvae of *Phalera bucephala* on birch [Ringwood, Hampshire. 12 September 1929. Ent62:232]

On sainfoin in old chalk workings [Totternhoe, near Dunstable, Bedfordshire. 13 September 1944. EMM81:183-185]

Sweeping low vegetation. One bug was carrying a small geometrid caterpillar on its rostrum [Hounslow Heath, Middlesex. 16 September 1952. Ent86:34-40]

Feeding on small lepidopterous larva [Otford, Kent. 18 September 1955. LondonHets]

Amongst herbage on scarp [Pilgrim Fort, Caterham, Surrey. 21 September 1968. LondonHets]

Sweeping [Wisley, Surrey. 21 September 1904. LondonHets]

Sucking sawfly larvae on Salix cinerea [Shirley Heath. 30 September 1872. TESL1872:283-285]

Sweeping heather [Shirley Common, Surrey. 1 October 1903. LondonHets]

From Calluna vulgaris [Tregaron Bog, Cardiganshire. 2 October 1954. Male. EMM92:54-64]

On wet vegetation close to a rhyne [Somerset. 10 October 2010. HN16:11]

In pond-side vegetation [St Osyth, VC19. 9 October 2010. HN16:11]

In marsh [Arklow, Co Wicklow. July 1926. Nymph. IrelandHets]

Sweeping [Ashtead Common, Surrey. LondonHets]

On Betula [Berkhamsted Common, Hertfordshire. September 1933. LondonHets]

Sweeping [Bookham Common, Surrey. LondonHets]

Sweeping damp spots. Seen amongst *Calluna* [Bucklebury Common, Berkshire. 1940. EMM77:101-104]

Sweeping *Salix* on a bombed site [Cripplegate, Middlesex. 1955. Adult. LondonHets]

On Salix up to 1000ft [Dartmoor. Ent87:25-30]

On heather [Dumfriesshire. August 1934. EMM71:164]

In moss [East Malling, Kent. April 1953. Male. EMM91:109]

On hazel [Eynsford, Kent. LondonHets]

On marsh herbage [Flitwick Moor, Bedfordshire. September. EMM86:6-8]

Amongst marsh cinquefoil, heather and oak [Hartlebury Common LNR, Worcestershire. Adults and nymphs. EMM133:17-26]

On Myrica gale [Hatchmere, Cheshire. Butler1923]

On *Cochlearia armoracia* and *Convolvulus sepium*. In culture, fed on larvae [Imperial College Biological Field Station, Slough. 1933/1934. TSBE2:47-67]

Marsh [Killurin, Co Wexford. July 1925. Adult and nymph. IrelandHets]

Lough shore [Lough Ennell, Co Westmeath. September 1930. IrelandHets]

Sucking the larvae of *Phalera bucephala* [Mid-Sussex. PTSLENHS1933-34:48]

Sweeping [Monk Wood, Epping Forest, Essex. September. LondonHets]

Canal bank [Near Athy, Co Kildare. September 1928. IrelandHets]

In a ride [Near Burton Moss, Westmorland. Nymphs. TSBE15:117-134]

By roadside, on a larva of Fox Moth (*Bombyx rubi*) [Near Hincheslea, New Forest. 1904. Female. TRESL55:323-408]

Marsh [Near Waterford, Co Waterford. September 1929. IrelandHets]

Amongst Calluna [Netherfield. Saunders1892]

On a dead larva of a fox moth (Bombyx rubi) [New Forest. Female. Butler1923]

From Myrica gale [New Forest. Butler1923]

On Dewberry (*Rubus caesius*) in a forest [Pembrey Forest, Carmarthenshire. August 1961. EMM97:200]

Sweeping heather and on bramble. Seek refuge behind the bramble leaf on the approach of the collector. One bug seen walking over a leaf with its rostrum held perpendicular with a larva impaled on the end [Raeburn Flow, Dumfriesshire. EMM70:162]

Beating [Reigate Hill, Surrey. LondonHets]

Killing Croesus septentriolanis on birch and willow [Ringwood, Hampshire. Ent74:71]

River bank [River Clodeagh, Curraghmore Demesne, Co Waterford. September 1929. IrelandHets]

Bred Asolcus davatchii (Hymenoptera) from eggs [Silwood Park, Berkshire. June 1964.

TRESL120:417-436]

In a marsh, from the leaves of *Iris pseudocorus*. Seen to prey upon the larvae of the hymenopteran *Rhadinoceraes micans* [Wolvercote, Oxford. July/August 1956. Adults and nymphs. EMM93:10]

Bred *Telenomus truncatus* from eggs placed in the open [Yateley, Hampshire. 1965. TRESL120:417-436]

Bred *Telenomus sokolovi* from eggs placed in the open [Yateley, Hampshire. 1965. TRESL120:417-436]

Marsh [Youghal, East Cork. August 1933. IrelandHets]

Piezodorus lituratus (Fabricius) (Pentatomidae)

On gorse [St Nicholas Fields LNR, York, VC62. 13 February 2019. Bronzy winter form and green spring form. Hem6:237]

On gorse (*Ulex europaeus*) growing on a cliff path [Between Port Erin and Bradda Head, Isle of Man. 6 April 1952. EMM88:159]

In flight [Rinsey Cliff, Cornwall. 20 April 1984. CornwallHets]

On gorse [Barnsthorn Wood, Effingham, Surrey. 10 May 1952. LondonHets]

Canal bank [Byfleet, Surrey. 14 May 1949. LondonHets]

On heath and furze [St Martha's, Chilworth, Surrey. 12 May 1924. PTSLENHS1934-35:12-15]

On broom [Baker's Wood, Heath and Reach, Bedfordshire. 16 May 1948. EMM86:6-8]

On furze [Poyntzpass, Co Armagh. 16 May 1900. IrelandHets]

On gorse [Chailey, Sussex. 30 May 1954. PTSLENHS1954-55:81-83]

On broom [Whipsnade Heath, Bedfordshire. 30 May 1944. EMM86:6-8]

On Stachys sylvatica [East Horsley, Surrey. 6 June 1903. Pair in copula. LondonHets]

Sweeping/beating along woodland rides and in clearings [The Chase, Broad Layings, VC12. 15 June 2015. Hem3:54]

On gorse [Hunters Inn, North Devon. 16 June 1960. Female. EG12:77-79]

Prey to a Sphecid wasp *Astata boops* [Hampstead Heath, Middlesex. 31 June 1940. Nymph. LondonHets]

Attached to a sepal of gorse (*Ulex europaeus*). Parasitised by a Proctotrupoid hymenopteran, emerging 1-5 days later [Gerrard's Cross Common, Buckinghamshire. 7 July 1946. Eggs. EMM85:193-206]

Beating *Ulex europaeus* [Aberystwyth, Cardiganshire. 17 July 1955. Female and nymph. EMM92:54-64]

Dyer's greenweed [Black Head, Cornwall. 27 July 2006. CornwallHets]

Prey to a Sphecid wasp *Astata boops* [Hampstead Heath, Middlesex. 30 July 1939. Nymph. LondonHets]

On leaves and fruits of a laburnam bush [South Norwood Country Park, London. 15 August 2015. Adults and nymphs. BJENH29:122-125]

On broom [Moneypot Hill, Ampthill, Bedfordshire. 20 August 1948. Nymphs. EMM86:6-8]

On oak [Pexhill, Cronton, Merseyside. 22 August 1984. Melanic adult male. EMM122:188]

On *Ulex europaeus* near shoreline [Templenoe, Co Kerry. 21 August 2007. Adults and nymphs. HN10:13]

From a sandy heath [Tiptree, North Essex. 25 August 1984. HSGN4:4]

On furze [Blackheath and Farley Heath. 30 August 1936. PTSLENHS1936-37:35-36]

On bramble [Dumfriesshire. 31 August 1934. Adult and nymphs. EMM71:164]

On broom [Astonbridge Hill, Gloucestershire. 1 September 1991. Nymphs. GloucsHets]

On birch [Shirley Common, Surrey. 1 September 1894. LondonHets]

On birch [Woking, Surrey. 3 September 1931. LondonHets]

On broom in gardens [Duchy College, Rosewarne, Cornwall. 9 September 2006. CornwallHets]

Sweeping clover on a railway embankment [Longcross Halt, Chobham Common, Surrey. 6 September 1971. EMM108:59]

On gorse [Whelford Pools, Gloucestershire. 7 September 1991. GloucsHets]

Beating oak-beech habitat [Mitcham Common, Surrey. 19 September 1983. LondonHets]

Beating oak-beech habitat [Mitcham Common, Surrey. 20 September 1983. LondonHets]

On oak [West Wickham, Kent. 17 September 1898. LondonHets]

On lough shore [Lough Neagh, Co Antrim. 26 September 1901. IrelandHets]

On birch [Oxshott, Surrey. 5 October 1907. LondonHets]

On bracken [West Wickham, Kent. 8 October 1898. LondonHets]

On broom [Ash Vale, Surrey. 14 October 1949. LondonHets]

On a wall along the river [Thames Marshes, Belvedere, Kent. 12 October 1984. ERJV101:47-49]

On gorse [Acton Glebe, Poyntzpass. 18 October 1900. Adults and nymphs. EMM37:73-74]

On gorse [Mitcham Common, Surrey. 17 October 1983. LondonHets]

On *Ulex* [Pyrford, Surrey. 19 October 1932. LondonHets]

On gorse [Acton Glebe, Poyntzpass. 17 November 1900. Adults and nymphs. EMM37:73-74]

On gorse [Acton Glebe, Poyntzpass. 6 December 1900. EMM37:73-74]

Sits on the stems or thorns of gorse, and if disturbed runs down the stem, or drops [Acton Glebe, Poyntzpass. 1900. EMM37:73-74]

On furze and tamarisk [Aldeburgh, Suffolk. SuffolkHets]

On brambles in a bog [Arditrea Rectory, Co Tyrone. September. IrelandHets]

On gorse [Bardsey Island, Caernarvonshire. EG25:45-51]

On both gorse and broom [Barmouth, Merioneth. August/September 1927. EMM64:62-64]

From broom [Bedfordshire. September 1950. EMM86:301]

From an abandoned metalliferous mine site [Binner Downs, near Leedstown, West Cornwall. 1994-2007. BJENH21:205-214]

Beating furze [Blackheath, Kent. 1903. LondonHets]

Garden [Bodmin, Cornwall. CornwallHets]

Staple host plant is *Ulex* [British Isles. Butler1923]

In a garden [Burford, VC23. HN8:13]

In furze bushes [Carmarthenshire. March and August. EMM48:108-111]

Under black medick (*Medicago lupulina*) on the edge of a path [Chobham, Surrey. July 1959. Nymphs. EMM95:287-288]

On broom [Clophill State forest, Bedfordshire. May and June. EMM86:6-8]

On heather [Corton, Suffolk. SuffolkHets]

On blackthorn [Cot Valley, Cornwall. 2000. CornwallHets]

On furze [Culver Cliff and Freshwater, Isle of Wight. Adults. EMM60:117-118]

On whin [Easton, Cumberland. 1936. ERJV51:160-161]

On Calluna [Epping Forest, Essex. November 1916. LondonHets]

Sweeping [In and around Newton Abbot, South Devon. August 1937. Nymph reared in culture. EMM74:20-21]

In sheltered sunny places on common furze (*Ulex*) [Ireland. IrelandHets]

Associated with *Lotus corniculatus* growing on rocky slopes and sand dunes [Isles of Scilly. August. EMM102:67-69]

On gorse [Jerrettspass, Co Armagh. April. IrelandHets]

Gravel pits [Kilsheelan, South Tipperary. July 1928. IrelandHets]

On birch leaves [Knebworth, Hertfordshire. Adults and eggs. LondonHets]

On bushes [Lound Wood, Suffolk. SuffolkHets]

Under black medick (*Medicago lupulina*) in cleared woodland [Near Marlow, Buckinghamshire. September 1959. Nymphs. EMM95:287-288]

On furze bushes [Near Wake Valley Ponds, Epping Forest, Essex, May, LondonHets]

Sweeping heather [Newton Moss, Dumfriesshire. August 1939. EMM76:179-180]

On gorse and broom [Pexhill, Cronton, Merseyside. July 1984. EMM122:188]

Beating [Redstone, Reigate, Surrey. LondonHets]

River bank [River Barrow, Glenmore, Co Kilkenny. September 1929. IrelandHets]

In a Rothamsted light trap on the roof of a building [School of Agriculture, Bangor, Gwynedd. EMM123:76]

On lupin and sycamore [Scrubs Wood, Hammersmith, Middlesex. 1984. Adults and nymphs. LondonHets]

Bred *Asolcus silwoodensis* (Hymenoptera) from eggs [Silwood Park, Berkshire. June 1964. TRESL120:417-436]

Bred *Asolcus nixomartini* (Hymenoptera) from eggs [Silwood Park, Berkshire. June 1963. TRESL120:417-436]

In a hotel garden [Southbourne, Hampshire. July 1922. Female. EMM58:231]

Bred Telenomus truncatus from eggs collected on gorse [Southern England. TRESL120:417-436]

On Lotus corniculatus [St Mary's & St Martin's, Cornwall. 1964/65. CornwallHets]

One of a mating pair seen being consumed by a Crab Spider (*Xysticus cristatus*) on gorse [St Nicholas Fields LNR, York, VC62. Adults. Hem6:237]

On gorse [Stoke Common, Buckinghamshire. LondonHets]

From a derelict, metalliferous mine site [Wheal Johnny, Kehelland, near Camborne, West Cornwall. 1994/95. BJENH9:111-115]

On *Ulex* [Wimbledon. EMM6:183]

Associated with *Lotus corniculatus* [Wingletang Downs, Isles of Scilly. June 1966. EMM102:285-286]

Under black medick (*Medicago lupulina*) [Witley Common, Surrey. July 1959. Nymphs. EMM95:287-288]

Bred *Telenomus sokolovi* from eggs collected on gorse [Yateley, Hampshire. TRESL120:417-436]

# Podops inunctus (Fabricius) (Pentatomidae)

Under a piece of plywood at the foot of a grassy roadside embankment [Near South Weald, Essex. 28 March 1976. LondonHets]

In limestone grassland [Fox Wood area, Edgeworth, Gloucestershire. 1 April 1984. GloucsHets]

Sweeping dead nettles [Bagley Wood, near Oxford, VC22. 29 April 1893. EMM29:191-192]

Under bricks and stones in a chalk-pit [Dunstable, Bedordshire. 3 May 1944. Female. EMM81:42]

In cow-dung [Rendcomb, near Cirencester, Gloucestershire. 18 May 1942. EMM80:18-19]

Under reptile mats placed on chalk grassland [Allington Farm, VC8. 25 May 2015. Hem6:230]

Sweeping [Isle of Wight. 22 May 1938. PTSLENHS1938-39:43-44]

Under piece of old decaying sack [Well Head, Bedfordshire. 24 May 1946. EMM86:6-8]

In moss and under leaves [Rickmansworth, Hertfordshire. 27 May 1900. LondonHets]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

Sweeping in a marshy field [Lea Valley. 11 June 1899. EMM35:270]

Sweeping along a woodland ride [Between Santon Warren and Two Mile Bottom, West Norfolk. 20 June 2019. Hem6:248]

Sweeping along a track through a woodland clearing [Devil's Punchbowl, near Croxton, West Norfolk. 17 June 2019. Hem6:247]

Sweeping a track through woodland and clearing [Near Two Mile Bottom, West Norfolk. 21 June 2019. Hem6:248]

In base-rich grassland [MOD Ashchurch, Gloucestershire. 29 June 1985. GloucsHets]

In arable fields [West Pentire, West Cornwall. 11 July 2003. BJENH18:165-170]

Beneath Statice limonium [South Benfleet, Essex. 16 July 1933. LondonHets]

At base of stem of *Urtica dioica* [Imperial College Biological Field Station, Slough. 4 August 1934. TSBE2:47-67]

Under grass refuse [Bookham Common, Surrey. 6 August 1895. LondonHets]

Grazed field [West Pentire Farm, Crantock, Cornwall. 31 August 2006. CornwallHets]

Sweeping on chalky ground [Chesham, Buckinghamshire. 12 September 1896. LondonHets]

In the feathers of a dead owl in old chalk workings [Totternhoe, near Dunstable, Bedfordshire. 13 September 1944. Males and female. EMM81:42]

Under log in a field [Stevington Wood, Bedfordshire. 22 September 1946. EMM86:6-8]

Sweeping in the derelict field [Near Hitchcopse Pit NR, VC22. 28 September 2011. Hem2:47]

Sweeping a mixture of dried grasses and clovers (including black medick) by a roadside [West

Moor Link Road (A630) at Edenthorpe, VC63. 9 October 2015. HN23:12]

Breeding [Broadway Gravel Pit, Worcestershire. 1984-1990. EMM129:60]

Under Artemisia maritima on sandhills [Camber, near Rye. April. Butler1923]

On sandhills [Coast north of Deal, East Kent. September 2004. HN4:4]

At the roots of damp grass [Culver Cliff, Isle of Wight. EMM60:117-118]

In chalk pit [Darenth, Kent. LondonHets]

In moss, sand, etc [Deal and Dover. EMM26:81-82]

Vacuum sampling on chalk grassland [Dorset. Stage unknown. HN2:7]

Feeding on the carcass of a dead chicken [East Malling, Kent. June. TSBE11:245-280]

In damp meadows [England. S&L1959]

Associated with rabbit, cow and horse dung, and dead animals [England. S&L1959]

In tufts of grass in dry places, such as chalk downs and gravel quarries [England. Winter/spring. S&L1959]

Under debris, old wood, *etc*. in grassy areas [Grounds of Pest Infestation Laboratory, Slough. 1950. EMM87:103]

Beneath dry horse-dung [Hester's Way, near Cheltenham, Gloucestershire. EMM81:109]

On the ground on gravelly banks [Hounslow Heath, Middlesex. Ent87:15-18]

Under vegetable matter [Kidbrook, Kent. 1897. LondonHets]

In a willow thicket on leaves of herbage [Lord's Bridge, near Cambridge. June 1941. EMM81:215]

In a sand pit [Near Hastings. May 1881. EMM18:40]

In a mouse-run under fine grass [Near Maidenhead. Adult and nymph. Butler1923]

At roots of *Helianthemum vulgare* on a hillside [Near Tring. September 1899. EMM35:270]

On chalk slopes [North Downs. LondonHets]

In a garden [Norwich. EMM38:80]

Fed on by larva of the ant Lasius niger [Oxford district. 1956/1957. EMM97:135-137]

Under dead mole [Peterborough district. EG20:125-135]

Under stones [Redstone, Reigate, Surrey. LondonHets]

Sweeping in a marshy field [River Lea. June. Butler1923]

From rough grassland on a river embankment [River Thames, next to Chelsea Power Station, VC21. August 2000. ERJV112:267-268]

In sand pit [Royden, New Forest. HantsHets]

In an ants' nest [Sandown, Isle of Wight. 1882. EMM19:160-161]

From dry sites using a towed suction sampler (DragVac) [Southern England. 2012. BJENH26:217-218]

Abounds under refugia at grassy sites [Southern England. HN11:12]

Amongst rubbish under plants on waste land by the coast [Swalecliffe, Kent. Butler1923]

In chalk pit [Swanscombe, Kent. LondonHets]

Under Helianthemum vulgare [Tring. Butler1923]

On and under corrugated tin and roofing felt pieces used to monitor reptiles [VC12. 2006-2007. HN11:12]

On the chalk [West Lulworth, Dorset. Ent47:146-147]

Sweeping [Woking. Saunders1892]

# Rhacognathus punctatus (Linnaeus) (Pentatomidae)

In moss [Dumfries, Scotland. 16 March 1929. EMM138:88]

From coastal heathland [Porth y Rhaw, Pembrokeshire. 6 April 1988. BJENH26:91-94]

In moss [Ash Vale, Surrey. 12 April 1964. PTSLENHS1964:7]

From mature coastal dune slacks with *Salix* cover [Tywyn Burrows, Carmarthenshire. 15 April 1989. BJENH26:91-94]

Sweeping Calluna [Mare Hill Common, Milford, Surrey. 16 April 2009. BJENH23:204]

Sweeping Calluna [Kirkconnell Flow, Dumfries & Galloway. 28 April 1979. EMM138:88]

From mature coastal dune slacks with *Salix* cover [Morfa Harlech dunes, Gwynedd. 27 April 1991. BJENH26:91-94]

From lowland raised mire [Fenn's Moss, Wales. 12 May 1951. BJENH26:91-94]

On a post with its proboscis inserted between the head and thorax of an almost dead beetle *Lochmaea suturalis* [Linwood, Hampshire. 16 May. JSBE1:194]

From mature coastal dune slacks with *Salix* cover [Tywyn Burrows, Carmarthenshire. 20 May 2005. BJENH26:91-94]

Coastal heath [Pen Enys Point, West Cornwall. 24 May 1989. BJENH4:119-121]

By river [River Wey, Eashing, Surrey. 4 June 1960. LondonHets]

Sweeping short mixed heath (*Erica*) and heather [Wildmoor Heath, Berkshire. 12 June 2010. BJENH29:43-44]

From lowland raised mire [Cors y Llyn NNR, Radnorshire. 19 June 1989. BJENH26:91-94]

Sweeping [Pylon Ride, California Country Park, Berkshire. 16 June 1996. BJENH12:42-43]

Suction sampling a mature dune slack dominated by *Salix repens* [Kenfig Burrows NNR, Glamorgan. 12 July 1994. BJENH26:91-94]

At the roots or on ling [Oxshott Heath and Esher Common. 12 July 1952. PTSLENHS1952-53:83-84]

Sweeping [Black Pond, Esher Common, Surrey. 16 July 2006. BJENH20:192]

Beating heather (*Calluna vulgaris*) [Burnt Platt Wood, Oxfordshire Chilterns. 20 July 2015. BJENH29:43-44]

From dry heathland derived from river shingle [Afon Tstwyth, Tynbedw, Cardiganshire. 23 July 1999. BJENH26:91-94]

Sweeping heather [Ambersham Common, West Sussex. 4 August 1979. PTBENHS17:18-19]

From lowland raised mire [Fenn's Moss, Wales. 3 August 1988. BJENH26:91-94]

Amongst dense moss beneath heather [Crabtree Hill, VC34. 10 August 2002. Adults. BJENH19:34-37]

Amongst heather foliage [Crabtree Hill, VC34. 10 August 2002. Nymphs. BJENH19:34-37]

Sweeping heather/heath swards on the wet margins of raised mires [Ballynahorne More Bog NNR, County Londonderry. 12 August 2005. Adults. EMM142:62]

Sweeping heather/heath swards on the wet margins of raised mires [Lisnagunoge Bog, County Antrim. 13 August 2005. Nymph. EMM142:62]

Sweeping heather/heath swards on the wet margins of raised mires [Mweela Bog, Murrins NNR, Tyrone. 20 August 2005. Adults. EMM142:62]

On a rock in herb-rich *Calluna vulgaris-Erica cinerea* dwarf-shrub heath [Lower slopes of Hallival, Isle of Rhum. 28 August 2000. EMM138:88]

Beating rose bush [Tuddenham Fen, Suffolk. 26 August 1905. SuffolkHetsAnn]

Sweeping Calluna vulgaris [Glen Ogle, Perthshire. 9 September 2000. EMM138:88]

Deep in wet Sphagnum [Fairwood Common, Gower, South Wales. 26 September 1988. Males and a female. EMM126:88]

From a mountain summit [Ben Nevis, Scotland. EMM138:88]

On heaths [Britain. S&L1959]

Under heather (*Calluna vulgaris* and *Erica cinerea*) growing on the banks of a gravel pit [Buckleberry Common, Berkshire. PTSLENHS1951-52:17-18]

Under Calluna [Bucklebury Common, Berkshire. 1940. EMM77:101-104]

Sweeping a cutover bog [Co Kildare. 2014. HN22:12]

In a tuft of furze and heather [Cornwall. Butler1923]

Amongst moss [Hartlebury Common LNR, Worcestershire. Adult. EMM133:17-26]

Amongst ling [Hartlebury Common LNR, Worcestershire. Nymphs. EMM133:17-26]

In sphagnum moss [Hothfield bog, Kent. September 1938. Adults. PTSLENHS1962:123-183] On sallow [Loch Rannoch. EMM3:118]

Out of a tuft of furze and heather [Near St. Ives and Hayle, West Cornwall. September 1888. EMM25:237-238]

Beating oaks [New Forest, Hampshire. HantsHets]

Sweeping heather [Newton Moss, Dumfriesshire. August 1939. EMM76:179-180]

Beating heather [Newton Moss, Dumfriesshire. August/September 1934. EMM71:164]

From Sphagnum [Newton Moss, Dumfriesshire. March. EMM70:162]

From sallow [Rannoch. Butler1923]

In moss amongst heath [Shirley & Leith Hill. April & September. EMM7:184-185]

From heathland [Surrey. BJENH3:91]

Sweeping creeping willow [Tentsmuir, Fife. 1970. EMM138:88]

In moss [Wimbledon Common. Saunders1892]

In moss under furze bush [Wimbledon Common, Surrey. LondonHets]

Rhaphigaster nebulosa (Poda) (Pentatomidae)

Beating mixed foliage [Warwick Gardens, Peckham, London, VC15. 13 September 2013. BJENH27:123-124]

In a garden [Lewisham, VC15. 18 September 2011. Male. HN17/18:5]

In a garden [Lewisham, VC15. 19 September 2011. Females. HN17/18:5]

On Ceanothus in a garden [Lewisham, VC15. 25 September 2011. Male. HN17/18:5]

On Common Lilac (*Syringa vulgaris*) in an urban park [Warwick Gardens, Peckham Rye, VC17. 22 September 2011. Adults. HN17/18:5]

From lilac [Warwick Gardens, Peckham, London. 23 September 2011. BJENH25:174]

On loquat (*Eriobotrya japonica*) in a garden [Lewisham, VC15. 1 October 2011. Female. HN17/18:5]

On Common Lilac (*Syringa vulgaris*) in an urban park [Warwick Gardens, Peckham Rye, VC17. August 2011. Nymphs. HN17/18:5]

On Common Lilac (*Syringa vulgaris*) in an urban park [Warwick Gardens, Peckham Rye, VC17. July 2011. Nymphs. HN17/18:5]

Sciocoris cursitans (Fabricius) (Pentatomidae)

In moss [Boxhill, Surrey. 3 February 1951. LondonHets]

Amongst moss growing on a steep chalk slope [Whitedowns, Surrey. 4 April 1995. Mating pairs. EMM133:79-80]

Gregariously in moss amongst grass in a chalky field [Howell Hill NR, Cheam, Surrey. 14 April 1991. BJENH7:175]

Sand dunes [Godrevy Towans, West Cornwall. 17 May 1990. BJENH4:119-121]

Among thin, scorched vegetation at the edge of a cliff [Thorncombe Beacon, Dorset. 22 May 1964. EMM100:134]

Brownfield site [Bluewater, Dartford, W. Kent. 1 June 2006. BJENH20:193-194]

On bare sandy slopes [Southend Sewage Works. 4 June 1997. Adults. BJENH14:225-231]

Sweeping derelict overgrown car park [Rochester. 9 June 2004. BJENH18:209]

Finger-tip grubbing on a brownfield site [Braeburn Park. 14 June 2012. BJENH29:69-88]

On sparsely vegetated track in herb rich open grassland [Woolwich Arsenal, VC16. 6 August 2006. HN11:12]

At the roots of a tall plant [Near Box Hill, Surrey. 15 August 1897. EMM34:13-15]

Under *Erodium* on side of chalk pit [Purfleet, South Essex. 30 August 1938. Female. EMM79:199] Sweeping [Deal Sandhills, Kent. 8 September 1976. PTBENHS17:18-19]

On motorway verge in disturbed grassland [M25 Junction 1B, VC16. 6 September 2005. Nymphs. HN6:9]

On slopes [Juniper Valley, Boxhill, Surrey. 12 September 1953. PTSLENHS1953-54:91-92]

On bare sandy slopes [Southend Sewage Works. 27 September 1996. Adults. BJENH14:225-231]

On sand dunes [Berrow, Somerset. September 1953. Adults. EMM91:75]

At the roots of *Hypericum perforatum* [Box Hill. August 1897. EMM38:39]

On a hill slope, in rough and very stony ground much overgrown with stonecrop and with scattered patches of wood sage (*Teucrium*). Occurred chiefly in crevices of chalk flints at and near the roots of the wood sage. None found in the stonecrop [Box hill. August and September 1901. Adults and nymphs. EMM38:39]

Sweeping *Teucrium* [Box Hill. June. Butler1923]

Heard to emit a song in culture [Box Hill, Surrey. April 1953. Males and females. EMM90:49-56] Sweeping [Box Hill, Surrey. August and September. S&L1959]

Under *Erodium* and in sand holes [Coast between Deal and Sandwich. EMM38:39]

On sandhills [Coast north of Deal, East Kent. September 2004. HN4:4]

From the dunes and cliffs [Cornwall. BJENH14:225-231]

From old railway sidings with sparse, ruderal vegetation on sandy ground [Cricklewood, North London, 2002. BJENH17:15-23]

On sparsely vegetated track, in herb-rich, open grassland [Cuxton Pit, VC16. 2005. HN6:9]

Chalk pit [Darenth, Kent. LondonHets]

On sand-hills [Deal. May & July. EMM7:184-185]

Sandhills [Deal. EMM26:81-82]

Under short, dry moss at the top of sand hills [Deal. September 1870. Males and females. EMM7:137-138]

Sand-hills [Deal. Spring and autumn. D&S1865]

On sandhills, under *Erodium* and on the grass- and moss-covered hillocks [Deal to Sandwich. Butler19231

On sandhills [Deal, Kent. BJENH12:140-141]

Open, unimproved chalk downland [Happy Valley and White Downs, Surrey. BJENH14:225-231]

On dunes, downs and other well-drained soils [Kent. BJENH14:225-231]

On downs [Surrey. BJENH14:225-231]

Sciocoris homalonotus Fieber (Pentatomidae)

Sweeping chalk grassland [Coney Banks, Chatham, Kent. 7 June 2016. BJENH30:27-29]

*Troilus luridus* (Fabricius) (Pentatomidae)

In moss [Epping Forest, Essex. 9 February 1963. LondonHets]

In Abies [Colne Valley, Uxbridge, 6 March 1934, Ent71:148-153]

On pine [Effingham, Surrey. 10 April 1954. LondonHets]

On heather [Wheal Edward, Kenidjack Cliff, Cornwall. 13 May 1996. CornwallHets]

On sallows [Porthmeor Valley, Cornwall. 17 May 1989. CornwallHets]

Beating the low foliage of a mature oak [Baron Wood, near Armathwaite, Cumbria. 23 May 1991. ERJV104:42]

Hawthorn [Porth Joke, Cornwall, 30 May 1989, CornwallHets]

Beneath a branch of hazel, among some small caterpillars [Coombe-wood, Surrey. 10 June 1794. Nymph. EMM61:253-257]

On fence beneath sycamore [Luton, Bedfordshire. 6 June 1948. EMM86:6-8]

Sweeping. In culture, a larva of the tachinid *Hemyda vittata* emerged and pupated [Covert Wood, near Canterbury. 11 June 1997. ERJV111:27-35]

Shaken from oak. In culture, seen to feed on a small caterpillar. Became adult after six days [Darnwood, Dartford. 26 June 1794. EMM61:253-257]

On birch [Deadmansea Wood, Bedfordshire. 30 June 1946. EMM86:6-8]

On trees [Oxshott. 30 June 1951. Nymphs. PTSLENHS1951-52:73-74]

Sucking a dead homopteran on an apple leaf [Randan Wood, near Bromsgrove, Worcestershire. 1 July 1948. Nymphs. EMM87:7]

On burdock [Hipsey Spinney, Bedfordshire. 14 July 1947. EMM86:6-8]

On aspen [King's Wood, Bedfordshire. 13 July 1946. EMM86:6-8]

In gravel pit [Near Kilsheelin, Clonmel, South Tipperary. 17 July 1928. Adult. IrelandHets]

On Pinus, Teucrium, etc [Flitwick Plantation, Bedfordshire. 25 July 1948. Nymphs. EMM86:6-8]

On aspen [Randan Wood, near Bromsgrove, Worcestershire. 2 August 1950. Nymph. EMM87:7]

Rostrum impaling homopteran Evacanthus acuminatus [Randan Wood, near Bromsgrove, Worcestershire. 7 August 1950. Nymph. EMM87:7]

Beating oak [Bookham Common, Surrey. 13 August 1967. Nymph. PTSLENHS1967:120]

On holly [Moneypot Hill, Ampthill, Bedfordshire. 20 August 1948. Nymphs. EMM86:6-8]

Beating oak, Preying on larva of the Lymantrid moth Orgyia antiqua [Wilverley Enclosure, New Forest. 16 August 1906. Nymph. TRESL55:323-408]

On hawthorn [Greystones, Co Wicklow. 22 August 1933. Nymph. IrelandHets]

On lakeside Salix [Killarney National Park, Co Kerry. 25 August 2007. Nymph. HN10:13]

Off ivy [Mawnan Church to Porth Saxon, Cornwall. 29 August 2006. CornwallHets]

Marshy ground [Near Ross Castle, Killarney, North Kerry. 26 August 1925. IrelandHets]

On mullein (Verbascum thapsus) [Randan Wood, near Bromsgrove, Worcestershire. 26 August 1948. Nymphs. EMM87:7]

On a birch leaf feeding on a caterpillar [Randan Wood, near Bromsgrove, Worcestershire, 29 August 1948. Nymph. EMM87:7]

Beating pine [Witley Common, Surrey. 27 August 2010. Hem6:244]

On oak [Byfleet, Surrey. 8 September 1935. LondonHets]

On *Alnus*, *Corylus* and *Fraxinus* [Uxbridge and the Colne Valley, Middlesex. 8 September 1934. LondonHets]

On Corylus [West Hyde, Hertfordshire. 7 September 1934. LondonHets]

On *Salix* by gravel-pit [Whelford Pools, Gloucestershire. 7 September 1991. Adult and nymphs. GloucsHets]

On blackthorn [Devil's Glen, Co Wicklow. 11 September 1934. IrelandHets]

On oak [King's Wood, Bedfordshire. 15 September 1946. EMM86:6-8]

On buckthorn (*Frangula alnus*) [Randan Wood, near Bromsgrove, Worcestershire. 15 September 1947. Nymph reared in culture. EMM87:7]

On beech [Ranmore Common, Surrey. 15 September 1932. LondonHets]

On *Alnus*, *Corylus* and *Fraxinus* [Uxbridge and the Colne Valley, Middlesex. 12 September 1935. LondonHets]

Adult with rostrum inserted in a female *Galerucella viburni in copula* [Randan Wood, near Bromsgrove, Worcestershire. 16 September 1948. Adult and nymph. EMM87:7]

Shaking alder [Hartlebury Common LNR, Worcestershire. 24 September 1993. EMM133:17-26]

Feeding on *Pontania* larva on *Salix viminalis* [Heath and Reach, Bedfordshire. 28 September 1946. Nymph. EMM86:6-8]

On *Betula pubescens* [Tregaron Bog, Cardiganshire. 2 October 1954. Males, females and nymphs. EMM92:54-64]

Attacking a sawfly larva [Carbis Bay, Cornwall. 9 October 1930. Male. JESSE1:60]

In a glove [Randan Wood, near Bromsgrove, Worcestershire. 17 October 1947. Adult. EMM87:7]

Sweeping beneath a sallow bush [Dowdeswell Wood, Gloucestershire. 6 November 1994. GloucsHets]

In a Rothamsted light trap [Rhandirmwyn, near Llandovery, Dyfed. 28 November 1979. EMM131:159-161]

On birch [Assington, Suffolk. SuffolkHets]

In old quarry [Ballyhenry, Co Wicklow. September 1930. IrelandHets]

On mountain ash [Bentley Woods, Suffolk. April. SuffolkHets]

On white poplar [Bentley Woods, Suffolk. August. Nymphs. SuffolkHets]

In garden [Bodmin, Cornwall. CornwallHets]

In a bed of stinging nettles. In culture, seen to feed on caterpillars of the small tortoiseshell butterfly, taken with them from the nettles [Builth Wells, Wye Valley, Breconshire. September 1946. Nymphs reared in culture. EMM83:59]

On hazel [Coulsdon, Surrey. September 1945. LondonHets]

Beating [Darenth & Mickleham. May & June. EMM7:184-185]

In the gizzards of Great Tits and Coal Tits [Forest of Dean, Gloucestershire. 1948-1951. Adult. EMM92:68-71]

From birch [Grounds of Pest Infestation Laboratory, Slough. September 1950. Nymph. EMM87:103]

On birch [Headley Lane, Surrey. 1893. LondonHets]

On bushes [Lound Wood, Suffolk. SuffolkHets]

On Alnus, Corylus and Fraxinus [Middlesex. July 1933. Ent71:148-153]

On oak [Minehead, Somerset. August 1928. EMM65:40-42]

In a damp corner of a wood close to a large pond. Seen sucking a nymph of *Piezodorus* [Near Battle. August 1881. Nymph. EMM18:113]

From birch [Norfolk. Saunders 1892]

On small bushes and trees [Pembrokeshire. Ent60:283-284]

Beating hedges [Rotherfield Peppard, Henley-on-Thames. 1902. EMM39:17-18]

On birch [Shirley, Surrey. 1893. LondonHets]

From Betula pubescens/pendula [Skipwith Common, VC61. 1981/82. EcolEnt10:159-169]

In culture, fed on Lepidoptera larvae and a dead nymph of *Palomena prasina* [Sussex. August 1932. Nymphs. EMM69:21]

On trees [Tollymore Park, Co Down. Nymph. IrelandHets]

Beating Scots pine/spruce [Tuddenham and Barton Mills, Suffolk. April 1935. EMM71:141-142]

Overwintering in *Abies* [Uxbridge and the Colne Valley, Middlesex. LondonHets]

On birch [Westmorland. TSBE15:117-134]

Zicrona caerulea (Linnaeus) (Pentatomidae)

Rank herbage [Broadway, Worcestershire. 8 February 1990. EMM129:60]

On a leaf of Mullein (*Verbascum*) in association with beetles *Altica palustris* [Thorpe-le-Soken, VC19. 31 March 2008. Adult. HN11:10]

In grass tuft on chalky hillside [Magpie Bottom, Kent. 5 April 1964. Adult. LondonHets]

Under a stone [The Moors near Blanchland. 4 April 1904. ERJV17:47]

On a stone in brilliant sunshine [Miller's Dale, Buxton. 1 June 1902. EMM41:27]

On an open chalky hillside with very low plants. The eggs were attached to organic debris [Longdown Hill, Buckinghamshire Chilterns. 7 June 1954. Adults, nymphs and eggs. EMM90:303]

Running among rocks and heather [Rocky Valley, Co Wicklow. 8 June 1934. IrelandHets]

In a wet place by a river [Dargle River, Powerscourt Deerpark, Co Wicklow. 15 June 1934. IrelandHets]

Sweeping in marsh [Gomshall, Surrey. 15 June 1887. LondonHets]

Sweeping [Kites Croft, South Hampshire. 11 June 2001. BJENH15:180]

In a garden [Woodmancote, Gloucestershire. 15 June 2015. HN23:10]

In a garden [Woodmancote, Gloucestershire. 18 June 2015. HN23:10]

In marsh by a river [River Shannon, Clonmacnoise, King's County. 29 June 1899. Nymph. IrelandHets]

Sweeping dense herbage on a brownfield site [Padworth Recycling Centre. 3 July 2015. BJENH29:69-88]

Two sucking a butterfly (*Agriades coridon*), one the thorax and the other the abdomen [Royston, Hertfordshire. 25 July 1915. Ent49:69]

On herbage by pond [Long Lane, Tingrith, Bedfordshire. 30 July 1944. EMM81:183-185]

Sweeping scrub [Park Downs, Banstead, Surrey. 28 July 1954. Adult. EMM92:47-48]

On an open chalky hillside with very low plants and grass [Coombe Hill, Buckinghamshire Chilterns. 1-2 August 1954. Nymphs. EMM90:303]

On an open chalky hillside with very low plants [Longdown Hill, Buckinghamshire Chilterns. 2 August 1954. Nymphs. EMM90:303]

Beating heather [Newton Moss, Dumfriesshire. 7 August 1934. EMM71:164]

On bramble [Near Ayton, VC81. 14 August 1961. Nymphs. BJENH18:223]

On roadside vegetation [Kenmare uplands, Kerry Way, Co Kerry. 28 August 2007. Nymph. HN10:13]

1000 feet [Powerscourt Deerpark, Co Wicklow. 28 August 1927. IrelandHets]

On Rubus [Aspley Heath, Bedfordshire. 4 September 1948. EMM86:6-8]

Marsh [Ballinafid Lough, Co Westmeath. 5 September 1930. IrelandHets]

Lough shore [Lough Ennell, Co Westmeath. 4 September 1930. IrelandHets]

Rank herbage in garden [Norton, Worcester. 3 September 1979. EMM129:60]

Grassy banks of a canal [Royal Canal, near Mullingar, Westmeath. 3 September 1930. IrelandHets]

Amongst Mentha hirsuta [Battle. Saunders1892]

In grass by roadside [Bookham Common, Surrey, LondonHets]

Under stones among ling [Brandy Gill, Cumberland. Adults. ERJV71:83-86]

Under Calluna [Bucklebury Common, Berkshire. 1940. EMM77:101-104]

Under Junipers [Chilworth. Saunders1892]

Washed up on a beach [Coolmore, East Donegal. IrelandHets]

In moss in chalk downs [Croydon & Mickleham. EMM7:184-185]

Amongst heather [Darvel's Hole, near Hastings, September 1879, EMM17:67-68]

In moss [Dorking district. 1899. ERJV12:18-19]

Vacuum sampling on chalk grassland [Dorset. Stage unknown. HN2:7]

Amongst ling [Epping Forest. 1907. EMM44:61-63]

On Galeopsis [Flitwick Marsh, Bedfordshire. July 1948. EMM86:6-8]

In moss on sandhills [Glenluce sandhills, Wigtownshire. EMM62:97]

On heather [Hampsfell, near Grange-over-Sands, Lancashire. 1904. Adults. ERJV16:267]

Dead under holly bush [Harefield, Middlesex. September 1934. Ent71:148-153]

In *Juncus* plots [Imperial College Field station, Silwood Park, Berkshire. September. Adults. EMM99:157-161]

Flying in woods [London district. Spring. D&S1865]

In moss [Mickleham Downs, Surrey. Winter. LondonHets]

On heather [Muggleswick, Durham. Ent64:70]

Seen sucking *Adimonia capraeae* [Near Battle. August 1881. EMM18:113]

Amongst long grass in boggy ground [Near Sarnau, Carmarthenshire. EMM48:108-111]

Under a juniper bush [Near Tring. September 1899. EMM35:270]

Amongst *Calluna* [Netherfield. Saunders1892]

Observed predating larvae of beetle *Haltica lythri* [Peterborough district. EG20:125-135]

Frequently seen walking about with a Heather Beetle (*Lochmaea suturalis*) impaled on its rostrum [Quantock Hills, Somerset. April 1936. EMM73:163]

Sweeping on chalk hills [Reigate, Surrey. LondonHets]

Attacking and killing the butterfly *Agriades coridon*, attached to the thorax and abdomen [Royston, Hertfordshire. August. Ent49:210-211]

Among heather [Scarborough. April, May, and October. D&S1865]

Among heather [Scarborough. September. Nymph. D&S1865]

Sweeping rank vegetation. In culture, fed on the pods of the supplied leguminous plants [Slough, Buckinghamshire. July 1954. Nymph reared in culture. EMM92:47-48]

Among *Calluna* on sand-dunes [Tresco, Isles of Scilly. June 1966. Adults and nymphs. EMM102:285-286]

On hillside amongst grass [Ventnor. Saunders1892]

## **Bibliography**

Aelia acuminata (Linnaeus) (Pentatomidae)

as A. acuminata EMM81:253-273, EMM82:94-95

as Ael. acuminata EMM91:7-27

as Aelia ERJV99:83

as Aelia acuminata BJENH10:122, BJENH12:193-213, BJENH12:43-45, BJENH16:187, BJENH18:233-252, BJENH19:182-184, BJENH19:264-265, BJENH20:176-177, BJENH28:5-15, BJENH29:122-125, BJENH29:69-88, BJENH7:118-126, BJENH7:175, Butler1923, CornwallHets, D&S1865, EMM11:208, EMM114:159, EMM116:132, EMM123:76, EMM129:164, EMM133:261-262, EMM143:11-16, EMM26:81-82, EMM36:94-101, EMM44:32-34, EMM60:117-118, EMM61:253-257, EMM69:234-245, EMM7:184-185, EMM71:113-114, EMM82:199-200, EMM87:103, EMM87:139, EMM87:236, EMM89:303, EMM92:54-64, Ent27:222, Ent34:135, Ent87:15-18, Ent91:100, Ent92:6-13, ERJV108:81-82, ERJV111:204, ERJV111:27-35, ERJV112:267-268, ERJV21:272-276, ERJV47:13-14, ERJV64:115, GloucsHets, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem2:26, Hem2:31, Hem2:41, Hem2:46, Hem3:1, Hem3:129, Hem3:40, Hem3:75, Hem3:83, Hem3:92, Hem4:102, Hem4:131, Hem4:18, Hem4:2, Hem4:27, Hem4:68, Hem4:85, Hem5:1, Hem5:102, Hem5:120, Hem5:149, Hem5:16, Hem5:191, Hem5:26, Hem5:40, Hem5:53, Hem5:69, Hem5:93, Hem6:13, Hem6:219, Hem6:283, HN13:10, HN13:11, HN14:10, HN15:11, HN15:12, HN15:13, HN16:12, HN16:13, HN17/18:26, HN22:8, HN5:7, HN6:8, HN7:11, HN9:15, HN9:3, HSGN13:1, HSGN13:12, HSGN6:3, LondonHets, PTSLENHS1949-50:78, PTSLENHS1950-51:72-73, PTSLENHS1950-51:79-80, PTSLENHS1951-52:43-44, PTSLENHS1953-54:79-80, PTSLENHS1962:123-183, PTSLENHS1965:83, PTSLENHS1965:91, S&L1959, Saunders1892, SuffolkHets, Synopsis1875, TRESL120:417-436, TSBE1:51-84, TSBE11:245-280

as Aelia acuminate HN23:10

as Aelia acuminatus HN10:13

as Allia acuminata ERJV20:229-231

as Aulia acuminata PTBENHS19:55

## Carpocoris mediterraneus Tamanini (Pentatomidae)

as *Carpocoris mediterraneus* BJENH32:363-364, EMM137:72, ERJV118:31-33, Hem1:38, Hem1:40, Hem1:41, Hem2:2, Hem2:4, Hem3:1, Hem4:2, Hem4:53, Hem4:56, Hem4:57, Hem4:68, Hem5:1, Hem5:102, Hem5:114, Hem5:149, Hem6:1, Hem6:13, HN21:5, HSGN4:A9

## Carpocoris purpureipennis (De Geer) (Pentatomidae)

as *Carpocoris purpureipennis* BJENH19:190, BJENH25:205-215, EMM137:72, ERJV118:31-33, Hem1:3, Hem1:40, Hem1:41, Hem2:31, Hem2:4, Hem3:1, Hem4:2, Hem4:53, Hem4:56, Hem4:57, Hem4:59, Hem4:68, Hem5:1, Hem5:102, Hem5:114, Hem5:149, Hem5:191, Hem6:13, HN21:5, HN9:2, HSGN1:4, HSGN4:A9

## Carpocoris purpureipennis/mediterraneus AMBIGUOUS (Pentatomidae)

- as C. fuscispinus EMM81:253-273
- as Car. pudicus EMM91:7-27, Hem1:92
- as Carpocoris fuscispina Butler1923, EMM91:91, HantsHets, TSBE11:245-280
- as Carpocoris fuscispinus EMM62:93, PTSLENHS1956:111-136, TSBE1:51-84
- as Carpocoris mediterraneus PTSLENHS1962:123-183
- as *Carpocoris pudicus* BJENH32:363-364, EMM137:72, EMM91:91, ERJV118:31-33, Hem1:3, Hem1:38, Hem2:4, S&L1959
- as Carpocoris purpureipennis CornwallHets, EMM91:91
- as Pentatoma baccarum Synopsis1875
- as *Pentatoma fuscispina* EMM14:11-14, EMM17:10-15, EMM38:66, EMM43:196-202, EMM69:234-245, Saunders1892
- as Pentatoma nigricorne D&S1865
- as Pentatoma nigricornis EMM14:11-14, EMM17:10-15

## Chlorochroa juniperina (Linnaeus) (Pentatomidae)

- as *Chlorochroa juniperina* Butler1923, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem3:1, Hem3:22, Hem3:23, Hem3:40, Hem4:131, Hem4:2, Hem4:68, Hem5:1, Hem5:102, Hem5:138, Hem5:16, Hem5:69, Hem6:14, HN17/18:26, HSGN1:4, HSGN4:A10, HSGN7:3, HSGN7:6, HSGN8:8, IrelandHets
- as Chlorochroa juniperum Ent67:129-130
- as P. juniperina EMM81:253-273
- as *Pentatoma juniperina* EMM43:196-202, EMM8:289-290, EMM9:292, Hem6:288, Saunders1892
- as Pentatoma juniperinum D&S1865, EMM41:27, EMM69:234-245, Synopsis1875
- as Pit. juniperina EMM91:7-27
- as *Pitedia juniperina* EMM83:14-15, Ent95:137-143, HN9:2, LondonHets, PTSLENHS1956:111-136, PTSLENHS1962:123-183, S&L1959, TSBE11:245-280

# Dolycoris baccarum (Linnaeus) (Pentatomidae)

- as Carpocoris baccarum EMM29:261-262
- as D. baccarum EMM81:253-273, EMM82:94-95
- as Doly. baccarum EMM91:7-27
- as *Dolycoris baccarum* BJENH11:52-54, BJENH12:243, BJENH13:244-245, BJENH18:165-170, BJENH18:233-252, BJENH21:187-192, BJENH28:5-15, BJENH29:122-125, BJENH31:288, BJENH4:61-62, BJENH9:111-115, Butler1923, CornwallHets, EG12:77-79, EMM102:67-69, EMM108:59, EMM109:112-113, EMM133:17-26, EMM133:261-262, EMM48:108-111, EMM66:43-44, EMM67:209, EMM71:113-114, EMM74:20-21, EMM80:201-203, EMM83:95, EMM85:229-230, EMM86:224, EMM87:236, EMM87:274, EMM88:102, EMM88:22, EMM89:17, EMM92:54-64, EMM94:183, EMM94:24, EMM94:93, EMM97:200, Ent100:157-165, Ent33:10, Ent57:90, Ent60:283-284, Ent67:129-130, Ent88:89-91, Ent92:6-13, ERJV111:27-35, ERJV21:272-276, ERJV48:131-132, GloucsHets, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem2:26, Hem2:31, Hem3:1, Hem3:22, Hem3:23,

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- as Dorycoris baccarum IrelandHets
- as *Pentatoma baccarum* D&S1865, EMM14:11-14, EMM17:10-15, EMM29:191-192, EMM33:217-220, EMM35:112-114, EMM43:196-202, EMM51:220, EMM6:183, EMM69:234-245, Saunders1892, SuffolkHets
- as *Pentatoma verbasci* EMM14:11-14, EMM25:237-238, EMM26:81-82, EMM53:116-122, Ent34:135, Synopsis1875

## Dyroderes umbraculatus (Fabricius) (Pentatomidae)

as *Dyroderes umbraculatus* BJENH27:13-19, BJENH30:27-29, BJENH32:363-364, Hem1:38, Hem1:40, Hem1:41, Hem3:2, Hem4:128, Hem4:2, Hem5:102, Hem5:149, Hem5:2, Hem5:80, Hem5:86, Hem5:90, Hem6:14, HN21:3, HN23:4

# Eurydema dominulus (Scopoli) (Pentatomidae)

- as E. dominulus EMM81:253-273
- as Eury. dominulus EMM91:7-27
- as Eurydema dominula HSGN1:5
- as *Eurydema dominulus* BJENH10:1-2, BJENH6:77, Butler1923, EG12:77-79, EMM136:52, EMM54:132-136, EMM61:253-257, EMM76:256, EMM77:40, EMM79:125, EMM82:275, EMM95:287-288, EMM98:24, ERJV117:221-227, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem3:2, Hem3:40, Hem4:102, Hem4:131, Hem4:2, Hem4:27, Hem4:45, Hem4:68, Hem5:102, Hem5:114, Hem5:120, Hem5:149, Hem5:192, Hem5:2, Hem5:40, Hem5:53, Hem6:15, HN23:8, HN4:9, HN6:15, HN9:6, HN9:7, HSGN12:2, HSGN8:8, LondonHets, PTSLENHS1961:6, PTSLENHS1962:123-183, S&L1959, TSBE11:245-280
- as *Strachia festiva* EMM17:234-235, EMM18:113, EMM32:141, EMM36:94-101, EMM39:17-18, EMM43:196-202, EMM69:234-245, EMM8:60-63, Ent5:252, Saunders1892, Synopsis1875 as *Strachia ornata* D&S1865, EMM8:60-63, Ent5:252

## Eurydema oleracea (Linnaeus) (Pentatomidae)

- as *E. oleraceum* EMM81:253-273
- as Eury. oleraceum EMM91:7-27
- as *Eurydema oleracea* BJENH10:176, BJENH10:177, BJENH11:52-54, BJENH13:246-247, BJENH15:180, BJENH16:187, BJENH17:186, BJENH18:208, BJENH18:233-252, BJENH20:49-55, BJENH28:5-15, BJENH29:122-125, BJENH4:180, CornwallHets, ERJV104:79-80, ERJV106:30, ERJV111:204, ERJV117:221-227, GloucsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem2:31, Hem3:100, Hem3:103, Hem3:129, Hem3:2, Hem3:40, Hem3:92, Hem4:102, Hem4:113, Hem4:117, Hem4:131, Hem4:2, Hem4:27, Hem4:40, Hem4:68, Hem5:102, Hem5:120, Hem5:149, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:53, Hem5:70, Hem5:93, Hem6:15, HN11:11, HN13:11, HN14:11, HN15:12, HN16:12, HN16:3, HN16:4, HN17/18:21, HN22:10, HN22:5, HN23:10, HN5:7, HN6:15, HN6:8, HN9:13, HSGN13:12, HSGN7:2, LondonHets, PTSLENHS1954-55:78-79, PTSLENHS1962:123-183, S&L1959
- as *Eurydema oleraceum* BJENH10:122, BJENH3:91, BJENH5:177-178, BJENH7:174-175, BJENH7:175, Butler1923, EG12:77-79, EG3:34-38, EMM54:132-136, EMM77:101-104, EMM81:275, EMM82:219, EMM82:275, EMM83:289, EMM83:61, EMM84:264, EMM86:6-

- 8, EMM87:103, EMM87:201, EMM87:236, EMM87:274, EMM87:308, EMM89:17, EMM89:212, EMM89:235, EMM89:303, EMM95:287-288, Ent87:15-18, ERJV106:30, HantsHets, PTSLENHS1950-51:78-79, PTSLENHS1950-51:79-80, PTSLENHS1953-54:7, TSBE1:51-84, TSBE11:245-280
- as *Strachia oleracea* D&S1865, EMM26:81-82, EMM36:94-101, EMM38:182, EMM39:17-18, EMM69:234-245, EMM9:192-193, Saunders1892, Synopsis1875

## Eurydema ornata (Linnaeus) (Pentatomidae)

- as *Eurydema ornata* BJENH21:184-185, BJENH25:205-215, EMM144:163-176, ERJV117:221-227, Hem1:3, Hem1:40, Hem1:41, Hem3:103, Hem3:2, Hem3:40, Hem4:113, Hem4:117, Hem4:121, Hem4:68, Hem5:102, Hem5:114, Hem5:149, Hem5:2, Hem5:40, Hem6:15, HN23:5
- as Eurydema ornate HN23:8
- as *Eurydema ornatum* Antenna30:184, BJENH19:190, BJENH19:190, BJENH19:190, BJENH25:205-215, EMM79:125, ERJV117:221-227, ERJV118:279, HN6:15, HN9:13 as *Euryderma ornata* ERJV125:70-72

## Eysarcoris aeneus (Scopoli) (Pentatomidae)

- as Esycorus aeneus Ent40:239, ERJV19:220
- as *Eusarcoris aeneus* Butler1923, EMM60:39, EMM71:113-114, HantsHets, PSLENHS1931-32:63-64, PTSLENHS1940-41:19-20
- as *Eysarcoris aeneus* BJENH18:208, CornwallHets, D&S1865, EMM111:228, EMM6:232, EMM69:234-245, EMM7:184-185, Ent38:286, Ent41:253, ERJV23:279, Hem1:26, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem3:2, Hem3:40, Hem4:131, Hem4:2, Hem4:45, Hem4:68, Hem5:102, Hem5:2, Hem5:26, Hem5:40, Hem5:54, Hem6:16, HN9:2, HN9:4, HN9:6, HN9:7, HSGN1:4, HSGN12:7, HSGN14:1, HSGN8:8, LondonHets, PSLENHS1905-06:92, PSLENHS1907-08:70, PSLENHS1908-09:65, PSLENHS1911-12:46, PTBENHS18:20, PTBENHS18:20, PTSLENHS1962:123-183, S&L1959, Saunders1892, Synopsis1875
- as S. aenea EMM81:253-273
- as Sto. aenea EMM91:7-27
- as Stollia aenea EMM86:6-8, EMM87:172-173, EMM92:54-64, TSBE11:245-280

## Eysarcoris venustissimus (Schrank) (Pentatomidae)

- as Eusarcocoris melanocephalus PSLENHS1900:15-16, PSLENHS1900:81, PSLENHS1903:53, PSLENHS1903:9-13
- as *Eusarcoris melanocephalus* Butler1923, EMM17:67-68, EMM61:253-257, EMM62:161-162, EMM77:101-104, EMM82:199-200, EMM83:175, EMM83:59-61, EMM85:79, EMM86:302-303, Ent57:90, HantsHets, PTSLENHS1951-52:126-130
- as Eusascoris melanocephalus Ent71:148-153
- as Eysacoris fabricii EMM116:122
- as Eysacoris melanocephalus PSLENHS1922-23:115
- as *Eysarcoris fabricii* BJENH18:233-252, BJENH21:205-214, BJENH25:205-215, BJENH7:118-126, CornwallHets, EG20:125-135, EG60:37-71, EMM103:22, EMM116:132, EMM119:62, EMM127:38, EMM133:261-262, EMM97:27-29, Ent95:137-143, GloucsHets, HN5:7, HN6:14, HN7:15, HN9:4, HSGN1:12, HSGN4:2, HSGN5:4, HSGN6:3, LondonHets, PTBENHS11:67-68, PTBENHS15:31-32, PTBENHS17:88-89, PTBENHS18:20, PTSLENHS1962:123-183, PTSLENHS1965:83, S&L1959, TRESL112:173-220, TSBE16:1-48
- as *Eysarcoris melanocephalus* D&S1865, EMM35:270, EMM53:169-173, EMM6:183, EMM65:91-93, EMM69:234-245, EMM80:75, Ent33:315, Ent36:270, Ent38:286, PSLENHS1905-06:92, Saunders1892, Synopsis1875
- as *Eysarcoris venustissimus* BJENH25:205-215, BJENH28:5-15, BJENH29:122-125, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem2:21, Hem2:31, Hem3:129, Hem3:2, Hem3:40, Hem3:75, Hem3:83, Hem3:92, Hem4:102, Hem4:131, Hem4:15, Hem4:2, Hem4:27, Hem4:68, Hem4:85, Hem5:102, Hem5:192, Hem5:2, Hem5:26, Hem5:38, Hem5:40, Hem5:54, Hem5:70,

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- as Laccostrephus fabricii PTSLENHS1960:82-83
- as S. fabricii EMM81:253-273, EMM82:94-95
- as Sto. fabricii EMM91:7-27
- as Stollia fabricii EG3:34-38, EMM81:183-185, EMM84:xlvii, EMM85:193-206, EMM85:249-253, EMM85:253, EMM85:39-41, EMM85:79, EMM86:224, EMM86:298, EMM86:301, EMM86:302-303, EMM86:6-8, EMM87:103, EMM87:139, EMM87:201, EMM87:216, EMM87:236, EMM87:308, EMM89:216, EMM89:236, EMM90:49-56, EMM90:81-82, EMM90:xxxix, Ent84:192, Ent87:15-18, Ent91:100, ERJV111:27-35, ERJV58:100-101, PTSLENHS1948-49:53, PTSLENHS1950-51:69-70, PTSLENHS1950-51:77-78, PTSLENHS1951-52:10, PTSLENHS1951-52:126-130, PTSLENHS1951-52:72-73, PTSLENHS1953-54:4, PTSLENHS1953-54:8, PTSLENHS1956:111-136, PTSLENHS1959:78-79, TSBE11:245-280

# Jalla dumosa (Linnaeus) (Pentatomidae)

- as J. dumosa EMM81:253-273
- as Jal. dumosa EMM91:7-27
- as *Jalla dumosa* BJENH25:205-215, BJENH26:91-94, Butler1923, D&S1865, EMM36:94-101, EMM69:234-245, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem3:2, Hem4:131, Hem4:2, Hem4:68, Hem5:102, Hem5:2, Hem6:16, HN9:2, PTSLENHS1956:111-136, PTSLENHS1962:123-183, S&L1959, Saunders1892, Synopsis1875, TSBE11:245-280

# Mecidea lindbergi Wagner (Pentatomidae)

as *Mecidea lindbergi* Atropos56:23-25, BJENH30:100, BJENH32:363-364, Hem3:103, Hem4:128, Hem5:120, Hem5:131, Hem5:133, Hem5:149, Hem6:17, HN23:2, HN23:3

## Neottiglossa pusilla (Gmelin) (Pentatomidae)

- as Aeliodes inflexa EMM69:234-245
- as Aelioides inflexa D&S1865, EMM6:183, EMM7:184-185
- as Aelioides inflexus EMM18:113, Ent34:135, Synopsis1875
- as N. pusilla EMM81:253-273, EMM82:94-95
- as Neo. pusilla EMM91:7-27
- as *Neotiglossa pusilla* EMM93:49-51, ERJV111:27-35, HantsHets, HN16:13, PTSLENHS1952-53:83-84
- as *Neottiglossa inflexa* EMM36:94-101, EMM44:22-29, EMM82:199-200, Ent28:312, Saunders1892
- as Neottiglossa pusilla BJENH10:176-177, BJENH10:177, BJENH18:209, BJENH20:193-194, BJENH28:5-15, Butler1923, CornwallHets, EG20:125-135, EMM133:261-262, EMM58:231, EMM68:38-39, EMM71:113-114, EMM72:258-259, EMM87:139, EMM88:45, EMM99:35, Ent71:148-153, Ent92:6-13, GloucsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem2:31, Hem3:129, Hem3:2, Hem3:40, Hem3:75, Hem3:83, Hem3:92, Hem4:102, Hem4:128, Hem4:131, Hem4:147, Hem4:18, Hem4:2, Hem4:27, Hem4:40, Hem4:68, Hem4:85, Hem5:102, Hem5:120, Hem5:149, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:54, Hem5:70, Hem5:93, Hem6:17, Hem6:247, Hem6:248, HN13:11, HN14:12, HN22:8, HN23:10, HN23:4, HN7:11, HN7:15, HSGN1:5, LondonHets, PTSLENHS1950-51:71-72, PTSLENHS1962:123-183, PTSLENHS1963Part1:67, PTSLENHS1966:96, S&L1959, SuffolkHetsAnn, TRESL120:417-436, TSBE1:51-84, TSBE11:245-280

#### Nezara viridula (Linnaeus) (Pentatomidae)

- as Nez. viridula EMM91:7-27, Hem1:103
- as *Nezara viridula* BJENH17:143-146, BJENH17:183, BJENH18:123, BJENH19:190, BJENH22:189-194, BJENH24:227-234, BJENH25:205-215, BJENH31:142-146, ERJV116:55-58, ERJV118:123-125, ERJV125:70-72, Hem1:3, Hem1:40, Hem1:41, Hem2:4, Hem2:46, Hem3:2, Hem3:40, Hem4:102, Hem4:131, Hem4:2, Hem4:68, Hem5:102, Hem5:149, Hem5:2,

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Palomena prasina (Linnaeus) (Pentatomidae)

- as Holcostethus vernalis EMM131:159-161
- as P. prasina EMM81:253-273, EMM82:94-95
- as Pal. prasina EMM91:7-27
- as Palomena prasina BJENH1:185, BJENH10:118-119, BJENH10:119, BJENH12:243, BJENH12:244, BJENH12:29-30, BJENH12:40, BJENH13:244-245, BJENH14:232, BJENH14:234, BJENH16:187, BJENH17:143-146, BJENH17:186, BJENH18:233-252, BJENH18:9-15, BJENH21:187-192, BJENH21:205-214, BJENH22:189-194, BJENH26:145-147, BJENH29:122-125, BJENH29:35-36, BJENH29:56-59, BJENH29:69-88, BJENH4:61-62, BJENH6:77, BJENH9:111-115, Butler1923, CornwallHets, EG12:77-79, EG20:125-135, EG60:37-71, EG64:146-165, EMM131:159-161, EMM133:17-26, EMM133:261-262, EMM134:43, EMM139:96, EMM142:52, EMM143:137-140, EMM143:1-6, EMM143:238, EMM144:163-176, EMM145:106, EMM60:117-118, EMM61:253-257, EMM64:62-64, EMM65:111, EMM65:40-42, EMM67:209, EMM68:213-214, EMM69:21, EMM72:258-259, EMM73:235, EMM74:20-21, EMM77:101-104, EMM82:42, EMM85:229-230, EMM85:39-41, EMM86:224, EMM86:301, EMM87:139, EMM87:255, EMM87:274, EMM87:308, EMM87:7, EMM87:93, EMM88:22, EMM88:45, EMM89:123, EMM91:143, EMM91:264, EMM92:54-64, EMM92:68-71, EMM97:200, Ent101:202-204, Ent47:146-147, Ent48:173, Ent57:90, Ent60:283-284, Ent88:89-91, Ent92:6-13, ERJV116:55-58, ERJV63:50-51, GloucsHets, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem2:31, Hem3:126, Hem3:2, Hem3:23, Hem3:40, Hem3:53, Hem3:75, Hem3:83, Hem3:92, Hem4:102, Hem4:131, Hem4:2, Hem4:27, Hem4:68, Hem4:86, Hem5:102, Hem5:120, Hem5:138, Hem5:159, Hem5:16, Hem5:192, Hem5:2, Hem5:205, Hem5:26, Hem5:40, Hem5:54, Hem5:70, Hem5:93, Hem6:18, Hem6:237, Hem6:266, HN10:11, HN10:13, HN13:11, HN16:12, HN17/18:26, HN17/18:7, HN19/20:7, HN2:3, HN4:1, HN5:6, HN6:14, HN7:11, HN7:15, HN7:16, HN9:13, HN9:15, HN9:3, HSGN1:14, HSGN11:10, HSGN12:10, HSGN13:1, HSGN13:12, HSGN3:9, HSGN6:3, HSGN7:2, IrelandHets, LondonHets, PTBENHS16:58, PTSLENHS1937-38:51, PTSLENHS1947-48:71, PTSLENHS1947-48:72-73, PTSLENHS1949-50:70-71, PTSLENHS1949-50:78, PTSLENHS1950-51:71-72, PTSLENHS1950-51:77-78, PTSLENHS1950-51:78-79, PTSLENHS1950-51:81-82, PTSLENHS1951-52:68-69, PTSLENHS1951-52:72-73, PTSLENHS1951-52:73-74, PTSLENHS1951-52:81, PTSLENHS1953-54:87-89, PTSLENHS1956:111-136, PTSLENHS1962:123-183, PTSLENHS1962:99-100, PTSLENHS1965:83, PTSLENHS1965:86-87, PTSLENHS1967:24-26, S&L1959, TRESL120:417-436, TSBE1:51-84. TSBE11:245-280
- as Palomena viridissima PTSLENHS1956:111-136
- as Pentatoma dissimile D&S1865, EMM29:191-192
- as *Pentatoma prasina* EMM35:270, EMM43:196-202, EMM69:234-245, EMM71:113-114, EMM85:246-247, Ent64:70, ERJV42:49-51, Saunders1892, SuffolkHets
- as Pentatoma prasinum EMM51:220
- as Pentatoma viridissima EMM18:113, EMM8:60-63, Synopsis1875
- as Pentatoma viridissimum EMM26:81-82, EMM39:17-18

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- as *P. rufipes* EMM81:253-273
- as Pent. rufipes EMM91:7-27
- as *Pentatoma rufipes* BJENH10:118-119, BJENH10:119, BJENH14:159, BJENH18:233-252, BJENH20:49-55, BJENH26:145-147, BJENH28:5-15, BJENH29:40, BJENH32:239-240, BJENH6:77, Butler1923, CornwallHets, EcolEnt10:159-169, EG2:258, EG20:125-135, EG60:37-71, EMM105:213, EMM106:31, EMM107:172-173, EMM109:132-139, EMM109:60, EMM114:21-24, EMM131:159-161, EMM133:17-26, EMM133:261-262, EMM134:43, EMM145:171, EMM146:62, EMM147:105-110, EMM48:239-240,

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- as *H. vernalis* EMM81:253-273
- as Hol. vernalis EMM91:7-27
- as Holcostethus strictus BJENH25:205-215, BJENH26:209-210, HSGN3:9
- as *Holcostethus vernalis* BJENH12:243, BJENH20:269, BJENH25:205-215, EMM139:96, EMM85:229-230, EMM86:224, EMM88:102, HN11:12, HN4:5, HSGN1:4, HSGN12:2, HSGN12:7, PTSLENHS1953-54:36, PTSLENHS1962:123-183, S&L1959, TSBE11:245-280

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- as Holocostethus vernalis HSGN8:8, LondonHets
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- as *Peribalus strictus* BJENH26:209-210, BJENH32:142, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:1, Hem3:2, Hem3:40, Hem4:131, Hem4:2, Hem4:27, Hem4:40, Hem4:68, Hem5:102, Hem5:120, Hem5:149, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:54, Hem5:93, Hem6:18, HN21:5, HN23:8
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- as P. bidens EMM81:253-273, EMM82:94-95
- as Picro. bidens EMM91:7-27
- as Picromeris bidens PSLENHS1904:35-37
- as *Picromerus bidens* Atropos26:59, BJENH12:243, BJENH26:91-94, BJENH29:43-44, Butler1923, CornwallHets, D&S1865, EG12:77-79, EG20:125-135, EMM133:17-26, EMM25:237-238, EMM38:269-270, EMM51:145-146, EMM51:220, EMM58:152-156, EMM58:232-233, EMM69:234-245, EMM70:162, EMM71:113-114, EMM71:164, EMM77:101-104, EMM81:183-185, EMM83:95, EMM85:84, EMM86:6-8, EMM87:7, EMM88:22, EMM88:45, EMM89:17, EMM89:212, EMM90:xliii, EMM91:109, EMM91:iii, EMM91:vii, EMM92:221-225, EMM92:230, EMM92:54-64, EMM92:65, EMM93:10, EMM94:103-105, EMM97:200, EMM97:27-29, Ent37:292, Ent47:146-147, Ent57:90, Ent60:235, Ent62:232, Ent71:148-153, Ent74:71, Ent86:34-40, Ent87:25-30, Ent89:13-15, ERJV17:67, ERJV47:13-14, ERJV51:160-161, ERJV52:128-129, GloucsHets, HantsHets,

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# Piezodorus lituratus (Fabricius) (Pentatomidae)

- as P. lituratus EMM81:253-273, EMM82:94-95
- as Peizodorus lituratus PSLENHS1907-08:81-82
- as Pie. lituratus EMM91:7-27
- as Piestodous lituratus PSLENHS1900:85-86
- as Piezodorus HSGN4:4
- as Piezodorus litteratus EG20:125-135
- as Piezodorus lituratus BJENH17:186, BJENH18:233-252, BJENH21:205-214, BJENH29:122-125, BJENH29:56-59, BJENH6:77, BJENH9:111-115, Butler1923, CornwallHets, EG12:77-79, EG25:45-51, EG61:243-250, EMM102:285-286, EMM102:67-69, EMM108:59, EMM122:188, EMM123:76, EMM131:159-161, EMM133:17-26, EMM14:165-167, EMM143:137-140, EMM16:182-183, EMM25:237-238, EMM26:81-82, EMM37:73-74, EMM48:108-111, EMM53:34-39, EMM54:132-136, EMM58:231, EMM60:117-118, EMM64:62-64, EMM65:40-42, EMM69:234-245, EMM71:164, EMM74:20-21, EMM76:179-180, EMM78:200-202, EMM8:60-63, EMM83:14-15, EMM83:59-61, EMM85:193-206, EMM85:229-230, EMM86:301, EMM86:6-8, EMM87:308, EMM88:159, EMM88:19, EMM89:17, EMM90:191-192, EMM92:54-64, EMM95:287-288, Ent47:146-147, Ent51:260, Ent60:283-284, Ent71:148-153, Ent88:188-189, Ent91:100, Ent92:6-13, ERJV101:47-49, ERJV111:27-35, ERJV124:179-181, ERJV21:272-276, ERJV51:160-161, GloucsHets, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem2:31, Hem3:103, Hem3:129, Hem3:2, Hem3:23, Hem3:40, Hem3:54, Hem3:75, Hem3:84, Hem3:92, Hem4:102, Hem4:131, Hem4:2, Hem4:27, Hem4:68, Hem4:86, Hem5:102, Hem5:114, Hem5:120, Hem5:138, Hem5:143, Hem5:159, Hem5:16, Hem5:192, Hem5:2, Hem5:205, Hem5:26, Hem5:40, Hem5:54, Hem5:70, Hem5:93, Hem6:19, Hem6:237, Hem6:238, HN10:13, HN17/18:26, HN8:13, HN9:15, HSGN1:13, HSGN10:11, HSGN11:10, HSGN11:6, HSGN12:11, HSGN13:12, HSGN6:3, IrelandHets, JSBE5:101-105, LondonHets, PSLENHS1924-25:106, PTBENHS18:20, PTSLENHS1934-35:12-15, PTSLENHS1936-37:35-36, PTSLENHS1949-50:71-73, PTSLENHS1949-50:78, PTSLENHS1950-51:67, PTSLENHS1952-53:49-50, PTSLENHS1952-53:75-76, PTSLENHS1954-55:81-83, PTSLENHS1954-55:9, PTSLENHS1962:123-183, PTSLENHS1964:36, PTSLENHS1965:83, S&L1959, Saunders1892, SuffolkHets, Synopsis1875, TRESL103:171-218, TRESL112:173-220, TRESL120:417-436, TSBE1:51-84, TSBE11:245-280, TSBE15:117-134 as Piezodorus purpureipennis D&S1865, EMM6:183, EMM8:60-63

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- as P. inuncta EMM81:253-273
- as Pod. inuncta EMM91:7-27
- as Podops inuncia BJENH18:233-252
- as *Podops inuncta* BJENH12:140-141, BJENH14:225-231, BJENH18:165-170, BJENH26:145-147, BJENH26:217-218, BJENH28:5-15, BJENH8:207, Butler1923, CornwallHets, EG20:125-135, EMM129:60, EMM38:80, EMM44:275, EMM51:220, EMM60:117-118, EMM60:39, EMM80:18-19, EMM81:109, EMM81:183-185, EMM81:215, EMM81:42, EMM85:193-206,

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## Rhacognathus punctatus (Linnaeus) (Pentatomidae)

- as Asopus punctatus Ent51:120, Saunders1892, SuffolkHetsAnn
- as *E. punctatus* EMM81:253-273
- as Eysar. punctatus EMM91:7-27
- as *Eysarcoris punctatus* EMM86:6-8, EMM87:288, PTSLENHS1950-51:78-79, PTSLENHS1951-52:17-18, PTSLENHS1952-53:49-50, PTSLENHS1952-53:83-84, PTSLENHS1960:82-83, TSBE11:245-280
- as Rhacognathus punctatus BJENH12:42-43, BJENH19:34-37, BJENH2:53, BJENH20:192, BJENH23:204, BJENH26:91-94, BJENH29:43-44, BJENH3:91, BJENH4:119-121, Butler1923, CornwallHets, D&S1865, EMM126:88, EMM129:60, EMM133:17-26, EMM138:88, EMM142:62, EMM17:234-235, EMM25:237-238, EMM3:118, EMM67:94, EMM69:234-245, EMM7:184-185, EMM70:162, EMM71:164, EMM76:179-180, EMM77:101-104, Ent47:146-147, Ent87:25-30, HantsHets, Hem1:3, Hem1:36, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem2:31, Hem3:100, Hem3:2, Hem3:22, Hem3:23, Hem3:40, Hem3:75, Hem4:102, Hem4:128, Hem4:131, Hem4:147, Hem4:2, Hem4:27, Hem4:40, Hem4:68, Hem4:86, Hem5:102, Hem5:120, Hem5:149, Hem5:159, Hem5:16, Hem5:192, Hem5:2, Hem5:205, Hem5:26, Hem5:40, Hem5:54, Hem5:93, Hem6:20, Hem6:235, HN15:13, HN17/18:26, HN22:10, HN22:11, HN22:12, HN6:1, HN7:11, HSGN1:5, HSGN10:12, HSGN11:7, IrelandHets, JSBE1:194, LondonHets, PTBENHS17:18-19, PTBENHS18:20, PTSLENHS1962:123-183, PTSLENHS1963Part1:64, PTSLENHS1964:7, PTSLENHS1965:83, S&L1959, Synopsis1875, TSBE1:51-84, TSBE16:1-48

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- as Liocoris cursitans PSLENHS1903:53
- as S. cursitans EMM81:253-273
- as Sci. cursitans EMM91:7-27
- as *Sciocoris cursitans* BJENH12:140-141, BJENH14:225-231, BJENH17:15-23, BJENH18:198-199, BJENH18:209, BJENH20:176-177, BJENH20:193-194, BJENH27:13-19, BJENH29:69-88, BJENH30:27-29, BJENH4:119-121, BJENH4:43, BJENH7:175, BJENH9:170, Butler1923, CornwallHets, EMM100:134, EMM133:79-80, EMM26:81-82, EMM34:13-15, EMM36:94-101, EMM38:39, EMM43:196-202, EMM44:22-29, EMM69:234-245, EMM79:199,

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as sciocoris terreus Dessioos, Elvini7.157-150, Elvini7.104-105, Symopsis10

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- as Asopus luridus D&S1865, EMM6:136, EMM7:184-185, EMM8:60-63
- as *Podisus luridus* EMM18:113, EMM39:17-18, EMM51:220, EMM53:169-173, EMM69:234-245, EMM8:60-63, Ent31:270, PSLENHS1898:110, PSLENHS1918-19:71-72, Saunders1892, SuffolkHets, Synopsis1875, TRESL55:323-408
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- as Troi. luridus EMM91:7-27
- as Troilus luridus BJENH1:185, BJENH26:91-94, BJENH28:5-15, Butler1923, CornwallHets, EcolEnt10:159-169, EG20:125-135, EMM131:159-161, EMM133:17-26, EMM133:261-262, EMM61:253-257, EMM64:218, EMM65:40-42, EMM69:21, EMM71:141-142, EMM77:101-104, EMM83:59, EMM85:193-206, EMM85:39-41, EMM86:224, EMM86:6-8, EMM86:84, EMM87:103, EMM87:7, EMM88:162, EMM91:237, EMM92:221-225, EMM92:54-64, EMM92:65, EMM92:68-71, EMM97:27-29, Ent59:84-85, Ent60:283-284, Ent62:286, Ent71:148-153, ERJV104:42, ERJV111:27-35, GloucsHets, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem2:31, Hem3:103, Hem3:2, Hem3:22, Hem3:23, Hem3:40, Hem3:75, Hem3:84, Hem3:93, Hem4:102, Hem4:131, Hem4:17, Hem4:18, Hem4:2, Hem4:27, Hem4:68, Hem4:86, Hem5:102, Hem5:120, Hem5:143, Hem5:147, Hem5:16, Hem5:192, Hem5:2, Hem5:205, Hem5:26, Hem5:40, Hem5:54, Hem5:70, Hem5:93, Hem6:21, Hem6:218, Hem6:235, Hem6:244, Hem6:261, Hem6:262, HN10:13, HN17/18:26, HN7:15, HN9:15, HSGN11:10, HSGN6:3, IrelandHets, JESSE1:60, LondonHets, PTSLENHS1933-34:32-33, PTSLENHS1935-36:27-28, PTSLENHS1950-51:67, PTSLENHS1951-52:73-74, PTSLENHS1952-53:78-79, PTSLENHS1953-54:77, PTSLENHS1962:123-183, PTSLENHS1965:83, PTSLENHS1967:120, S&L1959, TSBE1:51-84, TSBE11:245-280, TSBE15:117-134

# Zicrona caerulea (Linnaeus) (Pentatomidae)

- as Z. caerulea EMM81:253-273, EMM82:94-95
- as Zicr. caerulea EMM91:7-27
- as Zicrona caerula HN23:10
- as Zicrona caerulea APSLENHS1895:70, BJENH15:180, BJENH18:223, BJENH2:53, BJENH21:187-192, BJENH26:91-94, BJENH29:69-88, Butler1923, CornwallHets, EG20:125-135, EMM129:60, EMM135:161-167, EMM18:113, EMM35:270, EMM62:97, EMM7:184-185, EMM79:256, EMM81:183-185, EMM86:6-8, EMM87:328, EMM90:303, EMM90:xxvi, EMM91:109, EMM92:47-48, EMM92:65, EMM99:157-161, Ent28:346, Ent49:210-211, Ent49:234-235, Ent51:120, Ent64:70, Ent71:148-153, ERJV12:18-19, ERJV16:267, ERJV16:336, ERJV17:47, ERJV71:83-86, GloucsHets, HantsHets, Hem1:3, Hem1:40, Hem1:41, Hem1:92, Hem2:13, Hem2:31, Hem2:43, Hem3:104, Hem3:129, Hem3:2, Hem3:22, Hem3:23, Hem3:40, Hem3:75, Hem3:84, Hem3:93, Hem4:102, Hem4:131, Hem4:2, Hem4:27, Hem4:68, Hem4:86, Hem5:102, Hem5:120, Hem5:138, Hem5:149, Hem5:159, Hem5:17,

Hem5:192, Hem5:2, Hem5:205, Hem5:26, Hem5:40, Hem5:54, Hem5:70, Hem5:93, Hem6:21, Hem6:217, Hem6:235, Hem6:237, Hem6:243, Hem6:276, HN10:13, HN11:10, HN17/18:26, HN2:7, HN5:6, HN6:14, HN9:15, HSGN1:14, HSGN13:12, HSGN7:2, HSGN7:4, HSGN8:3, IrelandHets, LondonHets, PTBENHS20:67, PTSLENHS1954-55:5, PTSLENHS1954-55:92-93, PTSLENHS1962:123-183, S&L1959, Saunders1892, TSBE11:245-280, TSBE15:117-134
as Zicrona coerulea D&S1865, EMM102:285-286, EMM17:67-68, EMM39:69-70, EMM41:27, EMM44:61-63, EMM48:108-111, EMM51:220, EMM6:232, EMM68:41-42, EMM69:234-245, EMM71:164, EMM72:258-259, EMM73:163, EMM77:101-104, Ent47:146-147, Ent49:69, ERJV17:161, ERJV28:48, Synopsis1875, TSBE1:51-84

#### **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vicecounty Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above. Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

## Aelia acuminata (Linnaeus) (Pentatomidae)

Common name. The Bishop's Mitre Shieldbug.

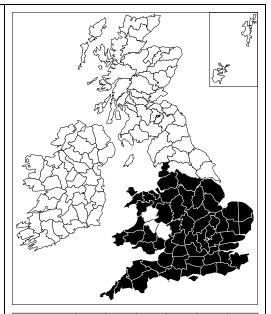
First report. D&S1865 as Aelia acuminata.

Ambiguities. None reported.

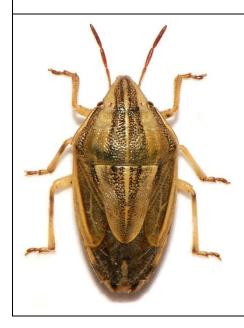
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily sweeping grassy areas (n) in meadows, woods, downs, brownfield sites, waste land (n), field and road margins, dismantled railway lines, gardens, coast (n) and dunes (n). Specific plant associations include Bromus, forget-me-nots, thistles (n), Ammophila arenaria, heather (n), moss, Phragmites and Erodium. The hymenopteran Asolcus waloffae has been bred from eggs.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April	1					
May		1	2	3	2	5
June	4	4	2	3	3	1
July	1	2	4 N	3 N		1 N
August	3	N	6	2	4 N	3 N
September	7	2 N		3	1	
October	1	1				
November						
December						



# Carpocoris mediterraneus Tamanini (Pentatomidae) Common name. The Parsley Shieldbug. First report. HN21:5 as Carpocoris mediterraneus. Ambiguities. Prior to EMM137:72 some records for this genus may refer to this species (Hem2:4-8). Geographical distribution. See vice-county map opposite. Seasonal distribution. See heximonth calendar opposite. Other details. None reported. 6-10 11-15 16-20 21-25 January February March April May June July August September October November December No habitus images are available.

# Carpocoris purpureipennis (De Geer) (Pentatomidae)

Common name. The Thistle Shieldbug.

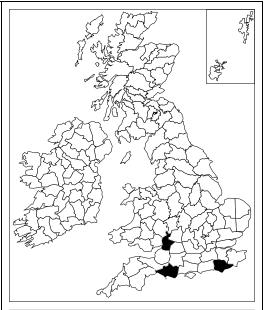
First report. EMM137:72 as Carpocoris purpureipennis.

Ambiguities. Between D&S1865 and Synopsis1875 the name *Piezodorus purpureipennis* is likely to refer to *Piezodorus lituratus* (Hem5:114-118). Prior to EMM137:72 some records for this genus may refer to this species (Hem2:4-8).

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported associated with nettle and on a beach hut.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June						
July						
August						
September						
October	1		1			
November						
December						

	H	Boodinibol				
No habitus images are available.						

## Chlorochroa juniperina (Linnaeus) (Pentatomidae)

Common name. The Scarce Juniper Shieldbug.

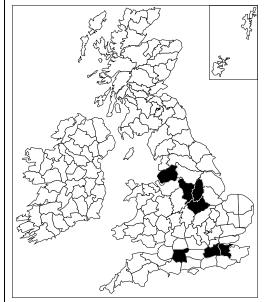
First report. D&S1865 as Pentatoma juniperinum.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from juniper (w), hazel/blackthorn and gorse. In culture, observed feeding on a wide range of plants, particularly lilac.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						1
April			1			
May						
June	1					
July						
August						
September						
October						
November						
December						

## Dolycoris baccarum (Linnaeus) (Pentatomidae)

Common name. The Hairy Shieldbug.

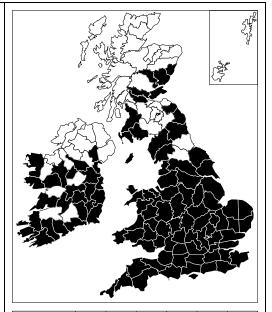
First report. D&S1865 as Pentatoma baccarum.

Ambiguities. Between Synopsis1875 and Saunders1892 the name Pentatoma baccarum is likely to refer to Carpocoris purpureipennis/mediterraneus (Hem5:114-118).

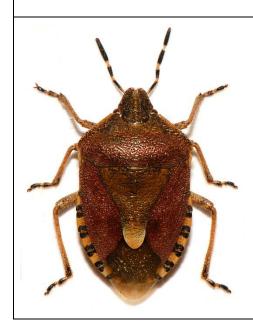
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from a variety of habitats, sweeping (n) or on plants (n), including gardens, fields, quarries, woods (n), downs, waste land, railway lines, cliffs, sandhills (n) and salt marsh. Specific plant associations include Ononis (n), heather, Erodium, broom, thistle, blackberry, buddleia, dandelion, dewberry, dog's mercury, Heracleum sphondylium, downy woundwort (n), gorse (n), Hypericum perforatum (n), mulleins (n), Prunus, Rhododendron, wild carrot, tree mallow, yarrow and clover. It has been taken vacuum sampling on chalk grassland. It has been seen feeding on greenfly and other pests of plum and damson.



	1-5	6-10	11-15	16-20	21-25	26-
January				1		
February						
March						
April	1			2	2	1
May	2	1	3	3	3	5
June	6	3	3	4	2	1
July	2	2	1	2	2	1
August	2	1	3 N	5	5 N	5
September	8	3	1	3	4	
October			1	2		
November						
December						



# Dyroderes umbraculatus (Fabricius) (Pentatomidae)

Common name. The Epauletted Shieldbug.

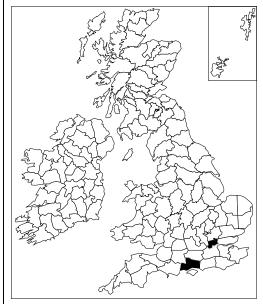
First report. BJENH27:13-19 as  $Dyroderes\ umbraculatus$ .

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported sweeping mixed hedgerow vegetation.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June						1
July				1		
August						
September		1				
October						
November						
December						

## Eurydema dominulus (Scopoli) (Pentatomidae)

Common name. The Scarlet Shieldbug.

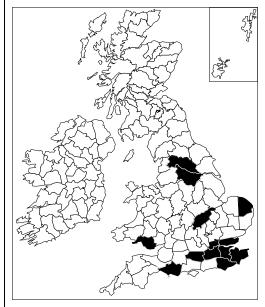
First report. D&S1865 as Strachia ornata.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported sweeping in woods and gardens. Specific plant associations include cuckoo-flower, gooseberry, strawberry, Arabis, hawthorn and wood-sage. There is a record of an adult found at the roots of cuckoo-flower in a wood. Nymphs hatched from eggs laid in culture fed on all parts of the supplied Alliaria petiolata, particularly on the fruits. There is a winter record in a heap of wood chips and shavings of Spanish chestnut in a wood.



	1-5	6-10	11-15	16-20	21-25	26-
January			1			
February						
March						
April	1		1			
May				1	1	
June						
July				1		
August						
September				1		
October			1			
November						
December						

## Eurydema oleracea (Linnaeus) (Pentatomidae)

Common name. The Brassica Shieldbug.

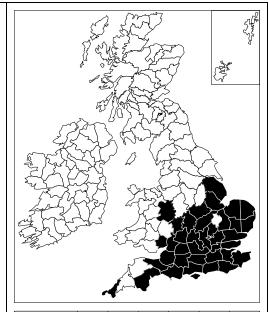
First report. D&S1865 as Strachia oleracea.

Ambiguities. None reported.

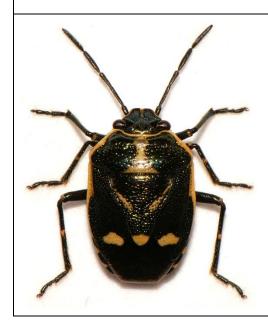
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported sweeping and on plants; from cliffs, sand dunes, gardens, farmland (n), roadside verge, sand-pits, woods and waste ground. Specific plant associations include sea radish, hoary pepperwort, horseradish (n), wild radish, yellow rocket, garlic mustard (n), sea carrot, yellow crucifer (n), black mustard, hedge mustard (n), swede, Thanet weed, cabbages, sweet rocket, mignonette and burnet-saxifrage. It has been taken in Malaise traps. Nymphs have been observed feeding on seed pods and stems of garlic mustard. In culture, copulation occurred involving different colour forms; all the adults reared from eggs were of the white-marked form.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April			1	1	5	1
May	3	8	2	6	6	3
June	5	5	3	1	1	3
July	2 N	1	3 N	1 N	1	2 N
August	1		1	2 N		
September	4 N	4 N	2 N		2 N	1
October						
November						
December						



## Eurydema ornata (Linnaeus) (Pentatomidae)

Common name. The Ornate Shieldbug.

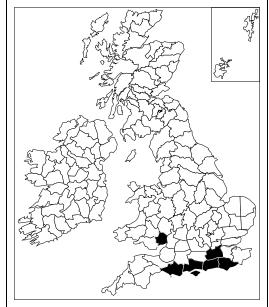
First report. ERJV117:221-227 as Eurydema ornatum.

Ambiguities. Between D&S1865 and Synopsis1875 the name *Strachia ornata* is likely to refer to *Eurydema dominulus* (Hem5:114-118).

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from a wood, cliff top, garden, foot of chalk cliffs and crawling on a rock in a quarry. Specific plant associations include *Salix*, sea radish and wallflower. It has been taken at light.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April			1	1	1	
May			1		1	
June		1				
July						
August						1
September						
October			2	1		
November						
December						

# Eysarcoris aeneus (Scopoli) (Pentatomidae)

Common name. The New Forest Shieldbug.

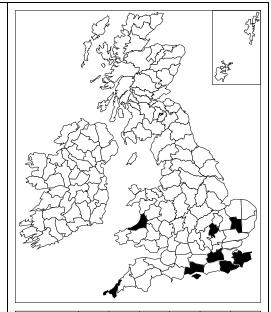
First report. D&S1865 as Eysarcoris aeneus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported sweeping grassy areas in woods, mature heather (n), and in a rushy meadow. Adults and nymphs incubated with several plant species became associated with *Hypericum pulchrum*, and feeding was seen on the green seed pods of the plant.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May				1		
June	1	1			2	
July					1 N	1
August				1	1	
September		2				
October						
November						
December						

## Eysarcoris venustissimus (Schrank) (Pentatomidae)

Common name. The Woundwort Shieldbug.

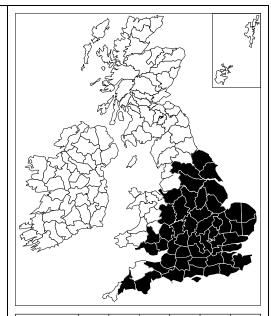
First report. D&S1865 as Eysarcoris melanocephalus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported sweeping and on plants; in woodland, hedgerow (n), riverbanks, road verge, derelict ground, fields, sand-pits and gardens. Specific plant associations include hedge woundwort (n), Ranunculus acris, Urtica dioica (n), Lamium purpureum (n), Lamium album, Heracleum, black horehound (n), bastard balm, thistle, deadly nightshade (n), ground ivy and mugwort. It has been seen feeding on nettle, the stem and young seed-pods of Epilobium parviflorum, and nutlets of hedge woundwort (n). Eggs have been observed on hedge woundwort, laid under leaves and amongst flower spikes. In culture, bugs have been seen feeding on mint, the stems, veins of leaves and flowers of hedge woundwort, and the fruits of Ranunculus acris. There are winter records from the litter of hedge woundwort and dead stems of Heracleum.



	1-5	6-10	11-15	16-20	21-25	26-
January				1		
February		1				
March						
April			1		1	
May	1		1	4	8	12
June	8 E	5 E	11 E	9 N	5	3
July	2 N	3 N	4	1	2	2
August		2 N	3 N	4 N	2	3
September	2 N	2	2	3	2	1
October						1 N
November						
December						



# Jalla dumosa (Linnaeus) (Pentatomidae) Common name. The Sinister Shieldbug. First report. D&S1865 as Jalla dumosa. Ambiguities. None reported. Geographical distribution. See vice-county map opposite. Seasonal distribution. See heximonth calendar opposite. Other details. A nymph has been reported beating Sea Buckthorn on sand dunes. 6-10 11-15 16-20 21-25 January February March April May June July August September October November December No habitus images are available.

# Mecidea lindbergi Wagner (Pentatomidae)

Common name. The Narrow Shieldbug.

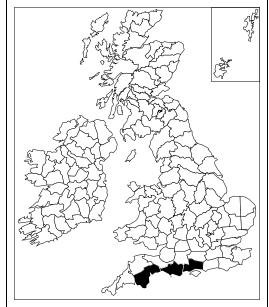
First report. HN23:2-3 as Mecidea lindbergi.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported at light.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June						
July				1		
August						
September						
October						
November						
December				4		4

# Neottiglossa pusilla (Gmelin) (Pentatomidae)

Common name. The Grassland Shieldbug.

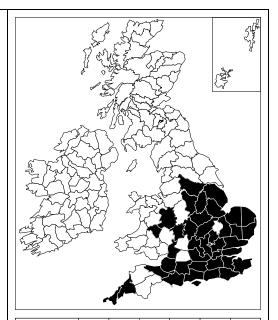
First report. D&S1865 as Aelioides inflexa.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported in grassland, brownfield sites, railway bank, chalk pits (n) and woods, frequently by sweeping (n). Specific plant associations include heather, Agrostis, Festuca, honeysuckle, Ulex and Teucrium scorodonia (n). It is reported as parasitised by the tachinid Alophora obesa. The hymenopteran Asolcus waloffae has been bred from eggs.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March					1	
April				1		
May						3
June	1	7	3	7 N	2	2
July	2	1	4	1	1	
August		1 N	2	1	1	3
September	2	4	2			1
October			1			1
November						
December						



## Nezara viridula (Linnaeus) (Pentatomidae)

Common name. The Tomato Shieldbug.

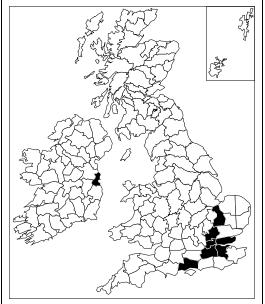
First report. ERJV116:55-58 as Nezara viridula.

Ambiguities. Prior to ERJV116:55-58 records are associated with imported produce (Hem2:4-8). Subsequent records which are not of wild breeding colonies may relate to imported produce.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from gardens (n), allotments (n) and other urban habitats. Specific plant associations include tomato (n), runner beans (n), potato (n), Golden Rod, Hemp Agrimony, bramble (n) and stinging nettle (n). Nymphs haven seen feeding on tomatoes, the stems and leaves of runner beans, and small bushes of wayfaring tree.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June						
July						
August			N	N	N	
September	N	2 N			1 N	N
October					N	
November						
December						

## Palomena prasina (Linnaeus) (Pentatomidae)

Common name. The Green Shieldbug.

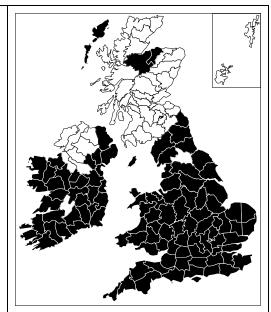
First report. D&S1865 as Pentatoma dissimile.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from woods, hedges, derelict land, gardens and roadsides, frequently by sweeping and beating. Specific plant associations include larch, blackcurrent (n), hazel (n), ivy (n), oak, sea buckthorn (n), bladder senna (n) broom, birch (n), Lawson's cypress (n), nettle (n), beans, lucerne, buddleia, marjoram, marigold, cherry, dewberry, firs, pine, hawthorn, Verbascum, poplar, privet, red valerian (n), Rubus idaeus, bramble, Geranium pratense and thistle (n). There are winter records on valerian and on a fence in a garden. The bug has been seen to feed on Matricaria and the white part of fresh bird droppings (n). Nymphs in culture with Crataegus have been seen to feed mostly on the unripe fruits. It has been taken at light and at sugar on an old pear-tree. It has been observed grasped by the spider Segestria florentina; and the hymenopteran Asolcus davatchii has been bred from eggs.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February	1		1			
March						1
April	1		1	1		1
May	3	2	6	4	3	5
June	5	2	2	3	5	3
July	4	2 N	2	N		
August	N	2 N	3 N	2 N	2	9 N
September	4 N	4 N	6 N	4	4	3 N
October	7	3	3	5		1
November		1 N		1	1	1
December						



## Pentatoma rufipes (Linnaeus) (Pentatomidae)

Common name. The Forest Shieldbug.

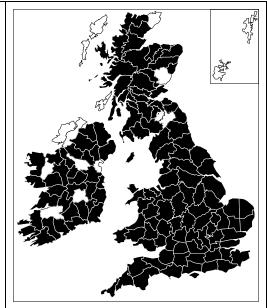
First report. D&S1865 as Tropicoris rufipes.

Ambiguities. None reported.

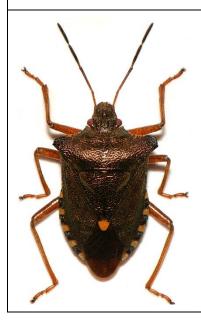
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported in orchards, meadows, urban parks, woods, canal bank, rocky beaches, mudflats, bogs and a chalk pit; frequently by beating, sweeping and on the branches and trunks of trees. Specific plant associations include oak (n), beech, rhododendron (n), cherry (n), apple (n), plum (n), aspen (n), birch (n), hawthorn (n), larch (n), potatoes, Scots pine (n), sycamore (n), Brewer's spruce, horse-chestnut (n), Achillea millefolium, alder, ash, beech, crab-apple, Sequoiadendron giganteum (n), heather, Malva sylvestris, sallow, Angelica, hops (n), bog grasses (n) and Mercurialis perennis. There are winter records of nymphs from Ulmus procera and from under the bark of fruit trees. It has been taken at light, in Malaise traps, in a dead hawk, and at sugar on an old pear-tree. It has been seen feeding on the white part of fresh bird droppings (n). Eggs have been found attached to an oak leaf, in sleeves on a cherry tree, and on a horse-chestnut leaf. Nymphs have been found in the gizzards of Great Tit, Blue Tit, Coal Tit and Marsh Tit, and seen predated by Nabis lativentris. In culture, nymphs have been observed feeding on the stem of a birch leaf, and predated by an Orthosid larva.



	1-5	6-10	11-15	16-20	21-25	26-
January			N	1		
February						
March	2					
April		1 N				
May			2	1		N
June	N		1 N	1 N	N	3 N
July	4 N	5 N	4	14 N	7	5
August	2	3	5 NE	2	3 E	3
September	6	3 N	4	3	2	2
October	2	1		1		
November						
December				N		1



# Peribalus strictus (Fabricius) (Pentatomidae)

Common name. The Vernal Shieldbug.

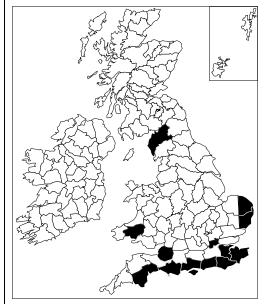
First report. D&S1865 as Pentatoma vernale.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from hazel, beating white poplar, sweeping mixed herbage in an oak wood, sweeping a rough grassy glade in an abandoned orchard, sweeping in a reed-bed, under brambles at the base of a concrete wall on a derelict site, and at light.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March				1		
April					1	
May					2	2
June			1	1		
July			1			
August			1			
September			1	1	1	
October						
November						1
December						

#### Picromerus bidens (Linnaeus) (Pentatomidae)

Common name. The Spiked Shieldbug.

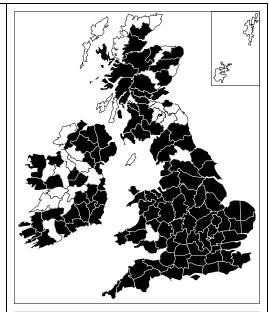
First report. D&S1865 as Picromerus bidens.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from canal/river bank (n), marsh (n), woods (n), edge of pond/lough, cliff face and chalk pit; sweeping, beating and on plants. Specific plant associations include heather (n), marsh cinquefoil, juniper, birch (n), Myrica gale, Iris pseudocorus (n), moss, willow, horseradish, oak, dewberry, hedge bindweed, hazel, sainfoin, hogweed (n) and bramble. It has been taken at light. It has been seen feeding on a variety of prey, including a larva of Macrothylacia rubi, a larva of moth Zygaena (n), larvae of Phalera bucephala, the moth Leucania impudens (the rostrum was inserted deeply amongst the scales of the anal tuft and between the vulvae) (n), a sawfly larva, larvae of the hymenopteran Rhadinoceraes micans (n), Croesus septentriolanis, larvae of a fox moth, a drinker moth (sucking the abdomen) (n), larva of the Marsh Fritillary (broke into the web, extracted a larva and fed on it in the open, the larva being impaled on the end of its rostrum) and larvae of Phalera bucephala. In culture, it has been seen to feed on a long-horned grasshopper that was taken with it. An egg batch has been found at the base of dead grass stem. The hymenopterans Asolcus davatchii, Telenomus truncatus and T. sokolovi have been bred from eggs.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May					N	
June					N	N
July	N		2	4 N	N	3 N
August	4	2	5	5	2	9
September	5	6	6 E	5	5	4
October	4	3	2 N	1	2	2
November				1		
December						



## Piezodorus lituratus (Fabricius) (Pentatomidae)

Common name. The Gorse Shieldbug.

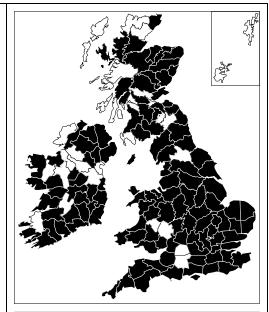
First report. D&S1865 as Piezodorus purpureipennis.

Ambiguities. None reported.

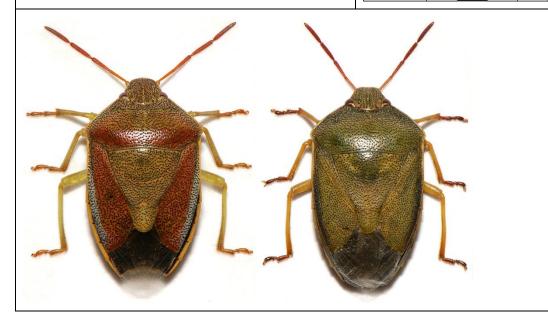
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from woods (n), sea/lough shore (n), sand dunes, river/canal bank, derelict land, sandy heath, gardens and gravel pits; sweeping, beating and on plants. Specific plant associations include gorse (e, n, w), broom (n), Lotus corniculatus, birch, blackthorn, bracken, dyer's greenweed, bramble (n), laburnam (n), lupin, sycamore, oak, Stachys sylvatica, tamarisk, clover and black medick (n). The bug has been taken at light. Eggs have been found attached to a sepal of gorse and birch leaves. The hymenopterans Asolcus silwoodensis, A. nixomartini, Telenomus truncatus, T. sokolovi and a Proctotrupid have been bred from eggs. A mating pair has been seen being consumed by a crab spider. Nymphs have been seen preyed upon by the Sphecid wasp Astata boops.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February	1		1			
March				1	4	1
April		1		4	2	1
May	1	2	6	3	3	6
June		2	2	4	1	N
July	1	E	N	2 N	1	1 N
August	1	2	1 N	5 N	5 N	5 N
September	3 N	3	1	5		4
October	2	3	2	4 N	1	
November				1 N		
December		1				



# Podops inunctus (Fabricius) (Pentatomidae)

Common name. The Turtle Shieldbug.

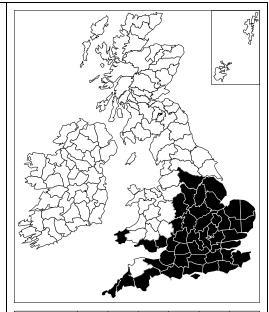
First report. D&S1865 as Podops inunctus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from woods, river embankment, arable fields, gardens, sand pit, chalk pits, sandhills, chalk slopes, gravelly banks, roadsides (w) and marshy fields; found beneath/at roots of damp grass, Urtica dioica, Helianthemum vulgare, Statice limonium, Artemisia maritima, log in a field, piece of old decaying sack, stones and reptile refugia. It has also been found in a willow thicket on leaves of herbage, an ant nest, moss, sand, leaf litter, a mouse-run under fine grass (n), amongst dung (horse and cow) and carrion (chicken, owl and mole). It has been taken using a suction sampler.



	1-5	6-10	11-15	16-20	21-25	26-
January	1					
February	1					
March			1			3
April	2	2		1		3
May	4	2		2	9	3
June	2	1	2	7	2	3
July		1	2	1	1	1
August	1	2			1	1 N
September		1	3	1	2	2
October	1	1	2		1	
November	1	1				1
December		1				



# Rhacognathus punctatus (Linnaeus) (Pentatomidae)

Common name. The Heather Shieldbug.

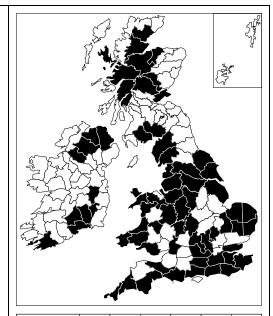
First report. D&S1865 as Rhacognathus punctatus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from heathland, lowland raised mire, cutover bog, mountain summit, woodland and dune slacks; sweeping, beating and on plants. Specific plant associations include heather (n), heath, moss (w), oak, rose, sallow and creeping willow. It has been taken suction sampling. It has been seen with its proboscis inserted between the head and thorax of the beetle *Lochmaea suturalis*.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March				1		
April		1	4	2	1	2
May	2	1	3	3	1	1
June	1		1	2		
July	1	2	3 N	4	1	1
August	4 N	2 N	1 N	3		4
September	1	1			1	1
October						
November						
December						



## Rhaphigaster nebulosa (Poda) (Pentatomidae)

Common name. The Mottled Shieldbug.

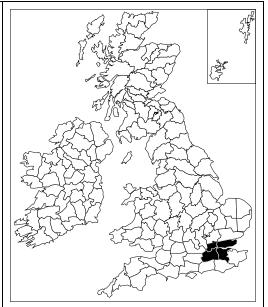
First report. HN17/18:5 as Rhaphigaster nebulosa.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported in park and gardens on Ceanothus, Syringa vulgaris (n) and Eriobotrya japonica.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June						
July					1	
August						
September	1 N		1	2	3	
October	1					
November						
December						

## Sciocoris cursitans (Fabricius) (Pentatomidae)

Common name. The Hawkweed Shieldbug.

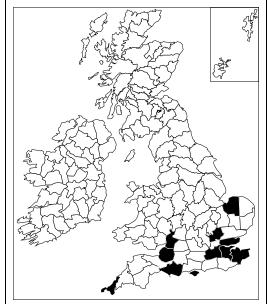
First report. D&S1865 as Sciocoris terreus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sandhills, cliff, chalk slopes, sandy slopes, brownfield site, chalk pit, old railway sidings and downs. Specific situations include: among thin scorched vegetation and moss; at the roots of Hypericum perforatum; in crevices of chalk flints at and near the roots of wood sage (n); on a motorway verge in disturbed grassland (n); under Erodium and on grass- and moss-covered hillocks of sandhills; sweeping Teucrium; sweeping a derelict overgrown car park; and under short, dry moss at the top of sand hills.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February	1					
March						
April	1	1	2	2	2	1
May	2	2		3	2	2
June	2	2	2	2	3	1
July				1		1
August	2	1	1	N		4
September		1 N	2	1		1
October						
November						
December						

## Sciocoris homalonotus Fieber (Pentatomidae)

Common name. The Chatham Shieldbug.

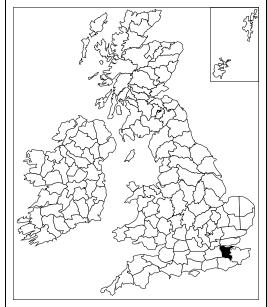
First report. BJENH30:27-29 as Sciocoris homalonotus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported sweeping chalk grassland.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June		1				
July						
August						
September						
October						
November						
December						

## Troilus luridus (Fabricius) (Pentatomidae)

Common name. The Bronze Shieldbug.

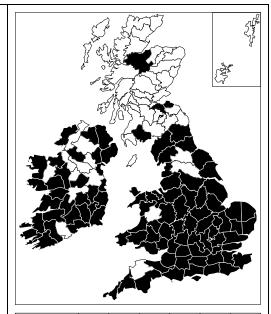
First report. D&S1865 as Asopus luridus.

Ambiguities. None reported.

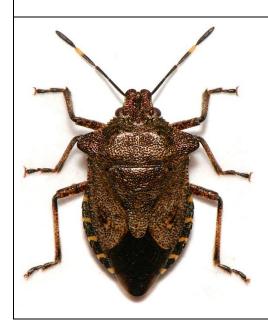
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from hedges, woods, garden, gravel pit, quarry, beside a lake and marshy ground; beating, sweeping and on plants. Specific plant associations include oak (n), pine (n), birch (n), hawthorn (n), stinging nettles (n), ivy, alder, hazel, ash, aspen (n), Salix (n), beech, blackthorn, buckthorn (n), burdock, heather, holly (n), rowan, mullein (n), Teucrium (n), white poplar (n) and apple (n). The bug has been taken at light. There are winter records from moss and Abies. Predation has been observed on Galerucella viburni, sawfly larva, Pontania larva (n), nymph of Piezodorus (n), larva of moth Orgyia antiqua (n) and homopteran Evacanthus acuminatus (n). In culture, it has been seen to feed on small tortoiseshell larvae (n) and a dead nymph of Palomena prasina (n). The bug has been found in the gizzards of Great Tit and Coal Tit. In culture, a larva of the tachinid Hemyda vittata emerged and pupated.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February		1		1	1	
March		1			2	1
April	1	1				2
May	1	1	4	1	1	4
June	1 N	1 N	3	2 N		3 N
July	N	2	3	2	1 N	2
August	N	1 N	1 N	2 N	2 N	4 N
September	1 N	7 N	5 N	7 N	3	1 N
October	2 N	4	1	3 N	1	
November		2	1		1	1
December						



## Zicrona caerulea (Linnaeus) (Pentatomidae)

Common name. The Blue Shieldbug.

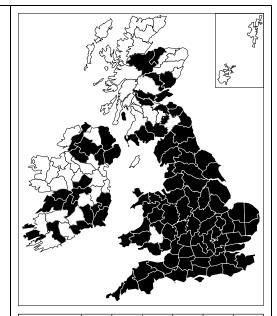
First report. D&S1865 as Zicrona coerulea.

Ambiguities. None reported.

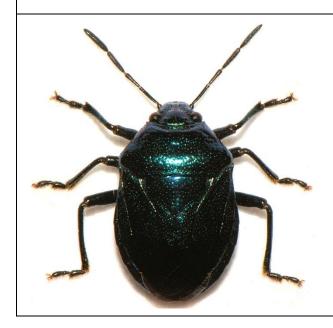
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sand dunes, boggy ground, canal bank, edge of pond, gardens, marsh (n), roadside (n), chalk hills (n), sandhills, lough shore and brownfield site; sweeping, beating, on and under plants. Specific plant associations include heather (n), grass, Mentha hirsuta, Juncus, moss, mullein (w), bramble (n) and Galeopsis. The bug has been taken suction sampling. Eggs have been found attached to organic debris. The bug has been observed predating the butterfly Agriades coridon, the heather beetle Lochmaea suturalis, larvae of beetle Haltica lythri, and Adimonia capraeae. In culture, a nymph was seen to feed on the pods of supplied leguminous plants.



	1-5	6-10	11-15	16-20	21-25	26-
January						1
February		1				
March						1
April	2	1		2		1
May	3	1	1		2	4
June	2	2 NE	7	2	1 N	5 N
July	3	3	1	1	3 N	3
August	3 N	2	1 N	2		3 N
September	6	1	1			1
October		1		2	1	
November						
December						



# A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (8) THE FAMILY COREIDAE

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#### Introduction

This is the eighth part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Coreidae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

#### **Heximonth records**

Arenocoris fallenii (Schilling) (Coreidae)

05B: 10 May 2014 [Brandon, VC28. Hem4:37]

05C: 12 May 2011 [Frogmore Gravel Pits, VC20. HN17/18:21] 12 May 2011 [Waterford Gravel Pits, VC20. HN17/18:21]

05F: 27 May 2004 [Penhale Sands, Cornwall. CornwallHets] 29 May 2004 [Penhale Sands, Cornwall. CornwallHets]

06A: Whit Monday and Tuesday 1906 (4-5 June) [Deal. EMM42:162-163]

06B: 9 June 1956 [Daymer Bay, Cornwall. CornwallHets] 10 June 1956 [Penhale Sands,

Cornwall. CornwallHets] 9 June 2012 [Ramparts Field, West Suffolk. BJENH26:45-46]

06C: 13 June 1989 [Braunton Burrows, North Devon. BJENH4:119-121]

06D: 20 June 2001 [Sennen Cove, Cornwall. CornwallHets] 19 June 1987 [Whitesand Bay, Cornwall. CornwallHets]

06E: 25 June 1899 [Deal. ERJV12:18-19] 24 June 2003 [Whitesand Bay, Cornwall. CornwallHets]

07A: 1 July 2006 [Arlesford, North Essex. BJENH20:191]

07C: 13 July 1995 [Penhale Sands, Cornwall. CornwallHets]

07E: 22 July 2015 [TL46, VC29. Hem3:93]

08A: 5 August 1934 [Worlington and Freckenham, Suffolk. EMM71:113-114]

08D: 18 August 1900 [Deal. Female. EMM39:69-70] 17 August 2015 [Drayton hospital, VC27. Hem4:40]

08F: 27 August 2006 [Upton Towans, Cornwall. CornwallHets]

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09B: 7 September 1950 [Rhossilli Bay, Glamorgan. EMM87:139]
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09C: 15 September 1996 [Sandy Heath, Bedfordshire. EMM133:261-262]

09E: 25 September 1928 [Upton Towans, Hayle, Cornwall. TSBE1:51-84]

### Arenocoris waltlii (Herrich-Schaeffer) (Coreidae)

05B: 10 May 2014 [Brandon, VC28. Hem4:37]

05D: 19 May 1919 [Fritton, Suffolk. EMM56:232]

06B: 9 June 2012 [Ramparts Field, West Suffolk. BJENH26:45-46]

07A: 1 July 1931 [Deal, Kent. Female. EMM68:41]

07E: 22 July 2015 [TL46, VC29. Hem3:93]

08A: 5 August 1901 [West Walton, Norfolk. EMM38:80] 5 August 1934 [Worlington and Freckenham, Suffolk. EMM71:113-114]

09C: 14 September 1934 [Freckenham, Suffolk. EMM71:113-114]

## Bathysolen nubilus (Fallén) (Coreidae)

06A: 4 June 2007 [The old Royal Aircraft Establishment, Farnborough, North Hampshire. Adults. BJENH20:269]

06B: 9 June 1949 [Darenth, Kent. LondonHets]

06D: 20 June 2007 [VC16. HN11:12]

06E: 25 June 1966 [Great Culand Chalk Pit, Burham, Kent. Nymph. PTSLENHS1966:118]

07A: 2 July 2009 [Ewell, Priest Hill, VC17. Adults and nymphs. HN14:10]

07B: 8 July 1950 [Darenth, Kent. LondonHets]

07E: 24 July 1997 [Clayswood, Bearsted, Kent. EMM134:265-266] 24 July 1948 [Darenth, Kent. Female and nymph. EMM85:23]

07F: 31 July 1948 [Darenth, Kent. LondonHets] 29 July 1945 [Near East Malling. Nymphs and adults. EMM81:278-279]

08F: 30 August 1938 [Purfleet, South Essex. Female. EMM79:199] 27 August 1961 [Swanscombe, Kent. LondonHets]

09A: 4 September 1964 [Swanscombe Chalk Pit, Kent. Adults and nymphs. LondonHets]

09B: 10 September 1967 [Between Snettisham and Heacham, Norfolk. EMM104:256]

09C: 14 September 1967 [Between Snettisham and Heacham, Norfolk. EMM104:256]

10B: 8 October 1952 [Plumstead, Kent. Adult. EMM89:134] 8 October 1953 [Sudbury, Suffolk. Adult. EMM90:40]

## Ceraleptus lividus Stein (Coreidae)

02E: 23 February 1885 [Chobham. EMM21:277]

04E: 24 April 1963 [Farningham Wood, Kent. LondonHets]

05B: 7 May 2014 [Braeburn Park. BJENH29:69-88]

05E: 25 May 1899 [Gomshall, Surrey. EMM35:270] 22 May 1956 [Silwood Park, Sunninghill, Berkshire. Male. EMM92:401] 25 May 2005 [White Nothe, VC9. HN7:14]

05F: 27 May 2015 [Wappenbury Wood NR, VC38. Hem3:93]

06A: 1 June 2014 [Dudmaston, Heath Farm, VC40. Adult. HN22:4] 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236] 1 June 2014 [Near Little Houghton, Barnsley, VC63. HN22:4] 4 June 2007 [Rownhams Wood, VC11. HN14:10]

06E: 23 June 1946 [Guildford, Surrey. LondonHets]

06F: 30 June 2009 [Hitchcopse Pit NR, VC22. Hem2:47]

07A: 1 July 1997 [Grass Vetchling Field, Clifton Hampden, VC23. Hem5:146] 2 July 1983 [Hayling Island, Hampshire. PTBENHS17:18] 4 July 1944 [Marley, Sussex (near Haslemere, Surrey). EMM82:199-200]

07F: 29 July 1945 [Near East Malling. Nymphs. EMM81:278-279]

08C: 15 August 1899 [Albury, Surrey. Butler1923]

08D: 17 August 2015 [Drayton hospital, VC27. Hem4:40]

08E: 24 August 1863 [Deal. Female. D&S1865] 25 August 1952 [Gomshall, Surrey. Adults and nymph. EMM89:11] 24 August 1996 [Maulden Wood, Bedfordshire. Adults and nymphs. EMM133:261-262] 21 August 1952 [Taplow, Buckinghamshire. Adults. EMM89:11]

- 09A: 1 September 1907 [Deal. EMM44:61-63] 1 September 2014 [Holme, VC28. Hem3:93] 4 September 1906 [Woking, Surrey. LondonHets]
- 09B: 10 September 1950 [Ash Vale, Surrey. PTSLENHS1950-51:79-80] 9 September 2011 [Braeburn Park. BJENH29:69-88] 8 September 2005 [Eype Mouth, VC9. Adults. HN7:14]
- 09C: 15 September 1952 [Harefield, Middlesex. Adults and nymph. EMM89:11] 15 September 1996 [Sandy Heath, Bedfordshire. EMM133:261-262]
- 10A: 3 October 1882 [Camber sand-hills. EMM19:139]
- 10B: 7 October 1945 [Writtle, near Chelmsford, Essex. LondonHets]
- 10D: 19 October 1951 [Grounds of Pest Infestation Laboratory, Slough. LondonHets]
- 11A: 4 November 1962 [Farningham Wood, Kent. LondonHets]
- 11B: 8 November 1964 [Near Woodham Walter, Essex. PTSLENHS1964:24]

## Coreus marginatus (Linnaeus) (Coreidae)

- 04D: 19 April 2007 [Burford, VC23. HN9:13]
- 04E: 23 April 2005 [Moat House Grounds, VC38. Hem3:93]
- 05B: 9 May 1928 [Bishopstoke, Hampshire. HantsHets] 9 May 1948 [Camberley, Surrey. LondonHets] 10 May 1952 [Farnham, Surrey. LondonHets]
- 05C: 11 May 1958 [Bookham Common, Surrey. Female and nymph. LondonHets] 14 May 1949 [Byfleet, Surrey. LondonHets] 11 May 1980 [Maidenhead, Berkshire. EMM116:132]
- 05D: 20 May 1934 [Pink Point, New Ross, Co Kilkenny. IrelandHets]
- 05E: 22 May 1899 [Enniscorthy, Co Wexford. IrelandHets] 24 May 1953 [Hedgerley, near Slough, Buckinghamshire. Adult. EMM89:223] 22 May 1899 [Killoughrum Forest, Co Wexford. IrelandHets] 25 May 1955 [Plas Crug, Aberystwyth, Cardiganshire. Male and female. EMM92:54-64] 25 May 1947 [Weybridge, Surrey. LondonHets]
- 05F: 31 May 1955 [Aberystwyth, Cardiganshire. Female. EMM92:54-64] 29 May 2011 [Fancott Meadows NR, Bedfordshire. Adult. HN17/18:7] 31 May 1979 [Maidenhead, Berkshire. EMM114:159] 27 May 2005 [Near Sandy, Bedfordshire. HN5:7] 28 May 1928 [Roches Point, East Cork. IrelandHets] 30 May 1998 [Vicarage Cliff, Morwenstow, Cornwall. CornwallHets]
- 06A: 3 June 1893 [Castletown Bere, West Cork. IrelandHets] 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236] 4 June 2005 [Nanterrow, Gwithian, Cornwall. CornwallHets] 4 June 1960 [River Wey, Eashing, Surrey. LondonHets] 2 June 1956 [Sheep Leas, Horsley, Surrey. LondonHets]
- 06B: 10 June 1893 [Chobham, Surrey. LondonHets] 8 June 1928 [Derrynane, South Kerry. IrelandHets] 7 June 1900 [Glandore, West Cork. IrelandHets] 9 June 1954 [Hounslow, Middlesex. LondonHets]
- 06C: 12 June 2005 [Stowe Wood, Cornwall. CornwallHets] 15 June 2015 [The Chase, Broad Layings, VC12. Hem3:54]
- 06E: 25 June 2012 [Bilston, Wolverhampton, VC39. Hem3:93] 25 June 2015 [Great Pen Wood, VC12. Hem3:54]
- 07A: 3 July 1939 [Byfleet, Surrey. LondonHets] 2 July 2014 [Helmdon, Northamptonshire. Hem2:26] 5 July 1944 [Starcross, South Devon. Ent88:89-91] 1 July 1901 [Thomastown, Co Kilkenny. IrelandHets]
- 07B: 8 July 1956 [Bookham Common, Surrey. LondonHets] 8 July 1956 [Bookham Common, Surrey. Nymph. LondonHets] 7 July 1927 [Craiguenamanagh, Co Kilkenny. IrelandHets] 8 July 1927 [Rathdrum, Co Wicklow. IrelandHets]
- 07C: 14 July 1900 [Cappoquin, Co Waterford. IrelandHets] 14 July 1927 [New Ross, Co Wexford. Nymph. IrelandHets] 11 July 2001 [Pendower Beach, Cornwall. CornwallHets] 13 July 2013 [Teal Lake, Whisby Nature Park, VC53. Adult. HN21:4] 11 July 2003 [West Pentire, West Cornwall. BJENH18:165-170]
- 07D: 20 July 1929 [Arklow district, Co Wicklow. Nymph. IrelandHets] 20 July 2005 [Churchtown Farm, Saltash, Cornwall. CornwallHets] 16 July 1928 [Clonmel district, Co Waterford. Nymph. IrelandHets] 16 July 1983 [Freshwater, Isle of Wight. BJENH6:77] 20 July 1929 [Kilgorman, Co Wexford. IrelandHets] 20 July 1930 [Meeting of the Waters, Co Wicklow. IrelandHets]
- 07E: 23 July 1952 [Taplow, Buckinghamshire. LondonHets] 23 July 2015 [TL56, VC29. Hem3:93] 21 July 1952 [West End Common, Surrey. Nymphs. LondonHets]

- 07F: 28 July 1934 [Dungarvan, Co Waterford. IrelandHets] 30 July 1951 [West End Common, Surrey. Nymph. LondonHets]
- 08A: 2 August 2015 [Bevercotes Road, Firth Park, Sheffield, VC63. HN23:12] 4 August 1985 [Pershore, Worcestershire. EMM129:60]
- 08B: 6 August 1952 [Datchet, Buckinghamshire. EMM88:255] 8 August 2019 [North Petherton Cemetery, VC5. Nymphs reared in culture. Hem6:263]
- 08C: 12 August 1956 [Bookham Common, Surrey. Nymph. LondonHets] 15 August 1928 [Lismore, Co Waterford. Nymph. IrelandHets] 11 August 2012 [Narborough, VC55. Hem3:93] 08D: 20 August 1951 [West End Common, Surrey. Nymph. LondonHets]
- 08E: 23 August 1947 [Camberley, Surrey. LondonHets] 22 August 2006 [Lansallos East Coombe, Cornwall. CornwallHets] 23 August 1948 [Ockham, Surrey. Nymph. LondonHets] 25 August 1943 [Ottery St Mary, Exeter, Devon. Nymphs. EMM82:43] 25 August 1952 [West End Common, Surrey. LondonHets]
- 08F: 26 August 1951 [Harefield, Middlesex. LondonHets] 28 August 2007 [Kenmare uplands, Kerry Way, Co Kerry. HN10:13] 28 August 2014 [Lydney, Forest of Dean, Gloucestershire. Adults and nymphs. HN22:10] 31 August 2014 [Lydney, The Cut, Gloucestershire. Adults and nymphs. HN23:10] 31 August 1931 [Macmine, Co Wexford. Nymph. IrelandHets] 30 August 1947 [Salisbury, Wiltshire. EMM88:45] 28 August 1945 [Titchfield, Hampshire. Adults and nymphs. EMM81:278-279]
- 09A: 3 September 1955 [Aberystwyth, Cardiganshire. EMM92:54-64] 1 September 2015 [Lydney, The Cut, Gloucestershire. Adults and nymphs. HN23:10] 5 September 1945 [Messack, St Justin-Roseland, Cornwall. Nymphs. EMM82:43] 5 September 1911 [Tiverton, Devon. Butler1923] 1 September 1941 [Woking, Surrey. Nymph. LondonHets]
- 09B: 10 September 1950 [Ash Vale, Surrey. LondonHets] 8 September 1935 [Byfleet, Surrey. PTSLENHS1935-36:27-28] 9 September 1935 [Byfleet, Surrey. LondonHets] 7 September 1929 [Curraghmore Demesne, Co Waterford. IrelandHets] 10 September 1924 [Devil's Glen, Co Wicklow. IrelandHets]
- 09D: 19 September 2015 [Beeston Common, VC27. Hem4:40] 20 September 1925 [New Ross, Co Wexford. Adult. IrelandHets]
- 09E: 24 September 1955 [Benfleet, Essex. LondonHets] 23 September 2012 [Bingley Island, Canterbury, East Kent. EG64:146-165] 23 September 1993 [Porthallow, West Cornwall. BJENH13:106-107]
- 09F: 26 September 2013 [Boultham Moor, VC53. Adult. HN21:4] 29 September 1951 [Mucking, Essex. LondonHets] 26 September 2013 [Narborough Dismantled Railway Line NR, VC28. Hem3:93]
- 10A: 2 October 1979 [Welland, Worcestershire. EMM129:60] 5 October 1950 [West End Common, Surrey. LondonHets]

# Coriomeris denticulatus (Scopoli) (Coreidae)

- 01A: 3 January 1885 [Headley Lane. PESL1885:iii]
- 03A: 1 March 1953 [Little Chalfont, Buckinghamshire. LondonHets]
- 04B: 10 April 1949 [Lampton, Middlesex. LondonHets]
- 04D: 18 April 1901 [Burnham, Buckinghamshire. LondonHets] 16 April 2014 [Hugglescote coal waste site, VC55. Hem3:93]
- 05A: 3 May 1951 [Booker, near High Wycombe, Buckinghamshire. LondonHets]
- 05B: 7 May 2005 [Chapel Porth to St Agnes Head, Cornwall. CornwallHets] 8 May 1944 [Lampton, Middlesex. LondonHets]
- 05C: 12 May 1934 [West Hyde, Hertfordshire. LondonHets]
- 05D: 19 May 1999 [Woolwich Common, West Kent. ERJV111:204]
- 05E: 24 May 1953 [Hedgerley, near Slough, Buckinghamshire. Adult. EMM89:223] 23 May 1953 [Mitcham Common, Surrey. LondonHets]
- 05F: 28 May 1944 [Coulsdon, Surrey. LondonHets] 28 May 1866 [Fleet. EMM69:234-245] 26 May 1980 [Grays Thurrock, Essex. LondonHets]
- 06A: 3 June 1951 [Booker, near High Wycombe, Buckinghamshire. EMM87:236] 2 June 1950 [Charlton Kings, Gloucestershire. GloucsHets] 5 June 1958 [Farningham Wood, Kent.

- LondonHets] 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236] 3 June 1935 [Imperial College Biological Field Station, Slough. JSBE1:165-166] 4 June 2003 [Kennack Sands, Cornwall. CornwallHets] 3 June 1985 [Minchinhampton Common, Gloucestershire. GloucsHets] 1 June 1985 [Mylor, Cornwall. CornwallHets] 4 June 1985 [Randwick Wood, Gloucestershire. GloucsHets] 1 June 1998 [Upton Towans, Cornwall. CornwallHets]
- 06B: 6 June 1930 [Lelant Towans, Cornwall. TSBE1:51-84] 7 June 1924 [Mickleham, Surrey. LondonHets] 8 June 1963 [Swanscombe, Kent. LondonHets]
- 06C: 13 June 2003 [Clough, Rotherham, VC63. HN7:15] 13 June 1950 [Edgeware, Middlesex. LondonHets] 14 June 1934 [Harefield, Middlesex. Female. Ent71:148-153] 13 June 2000 [Kennack Sands, Cornwall. CornwallHets] 15 June 1932 [Lelant Towans, Cornwall. TSBE1:51-84] 11 June 1898 [Reigate. PSLENHS1898:102-105] 12 June 2000 [Rock sandhills, Cornwall. CornwallHets]
- 06D: 17 June 1934 [Boxmoor by Hemel Hempstead, Hertfordshire. LondonHets] 19 June 1985 [Sherborne, Gloucestershire. GloucsHets]
- 06E: 25 June 2015 [Great Pen Wood, VC12. Hem3:54] 23 June 2005 [Polridmouth, Cornwall. CornwallHets] 25 June 2012 [Wednesbury/West Bromwich, VC39. Hem3:93]
- 06F: 29 June 1985 [Ashchurch, Gloucestershire. GloucsHets] 29 June 1948 [Thursley, Surrey. LondonHets]
- 07A: 2 July 2009 [Ewell, Priest Hill, VC17. HN14:10] 4 July 1944 [Houghton Regis, Bedfordshire. EMM81:183-185] 4 July 1983 [Perranarworthal Estuary, Cornwall. CornwallHets]
- 07B: 10 July 1976 [Darenth Wood, Kent. LondonHets] 8 July 1950 [Darenth, Kent. Nymphs. EMM87:172-173] 6 July 1858 [Shanklin, Isle of Wight. EMM69:234-245]
- 07C: 14 July 1943 [Abinger, Surrey. LondonHets] 14 July 2003 [Bustard Vedette, VC8. Hem5:188] 15 July 2001 [Hayle Towans, Cornwall. CornwallHets]
- 07D: 20 July 1947 [Galley Hill, Potton, Bedfordshire. Nymphs. EMM86:6-8]
- 07E: 23 July 1952 [Taplow, Buckinghamshire. Adults and nymphs. EMM88:255] 22 July 2015 [TL46, VC29. Hem3:93]
- 07F: 29 July 1951 [Erith, Kent. Nymph. LondonHets] 27 July 1961 [Swanscombe, Kent. LondonHets] 30 July 1952 [Taplow, Buckinghamshire. Adults and nymphs. EMM88:255]
- 08B: 6 August 1952 [Datchet, Buckinghamshire. Adults and nymphs. EMM88:255] 8 August 2006 [Predannack Wollas, Cornwall. CornwallHets]
- 08C: 15 August 1899 [Albury, Surrey. Butler1923] 13 August 1952 [Hounslow Heath, Middlesex. Adult. Ent86:34-40] 11 August 1898 [Redstone, Reigate, Surrey. LondonHets]
- 08D: 16 August 1933 [Harefield, Middlesex. Ent71:148-153]
- 08E: 22 August 1952 [Datchet, Buckinghamshire. LondonHets] 25 August 1952 [Gomshall, Surrey. Adults and nymphs. EMM89:11] 21 August 1952 [Taplow, Buckinghamshire. Adults. EMM89:11] 21 August 1952 [Taplow, Buckinghamshire. Adults and nymphs. EMM89:11]
- 09A: 2 September 2002 [Holywell Dunes, Cornwall. CornwallHets] 2 September 1929 [Lelant Towans, Cornwall. TSBE1:51-84] 4 September 1964 [Swanscombe Chalk Pit, Kent. LondonHets]
- 09B: 8 September 1936 [St Albans, Herfordshire. LondonHets]
- 09C: 15 September 1952 [Harefield, Middlesex. Adult. EMM89:11] 15 September 1939 [Harpenden, Hertfordshire. LondonHets] 11 September 1985 [Stowe Wood, Cornwall. CornwallHets]
- 09D: 16 September 2015 [Great Rissington, Gloucestershire. Nymph. HN23:10]
- 09E: 25 September 2010 [Ledston Ings, VC63. HN19/20:12]
- 10A: 5 October 1976 [Darenth Wood, Kent. LondonHets] 5 October 1952 [Hounslow Heath, Middlesex. Ent86:34-40]
- 11B: 8 November 1964 [Little Baddow, Essex. PTSLENHS1965:83]

## Enoplops scapha (Fabricius) (Coreidae)

- 04D: 20 April 2005 [Black Ven, Charmouth, VC9. HN6:14]
- 05F: 30 May 1989 [Lower Predannack, West Cornwall. BJENH4:119-121]

- 06E: 21 June 2001 [Poldhu Cove, Cornwall. CornwallHets]
- 06F: 28 June 1969 [Kimmeridge Bay, Dorset. Nymphs. EMM105:171] 30 June 1989 [Newdowns Head, West Cornwall. BJENH4:119-121]
- 07B: 6 July 1989 [Tidnacombe, East Cornwall. BJENH4:119-121] 10 July 1929 [Tresillian, Cornwall. TSBE1:51-84]
- 07C: 15 July 1993 [Porthysgo on Llyn, Caernarvonshire. Adult and nymphs. BJENH9:3-5]
- 07F: 29 July 1930 [Looe, Cornwall. TSBE1:51-84]
- 08D: 19 August 1985 [Porth Ceiriad, Llyn, Caernarvonshire. BJENH9:3-5]
- 08E: 22 August 2006 [Lansallos Cove, Cornwall. Nymph. CornwallHets] 22 August 1943 [Robin Hood's Bay, North Yorkshire. EMM109:167]
- 08F: 30 August 2009 [Folkestone Warren, Kent. BJENH24:54-55] 28 August 1956 [Kimmeridge Bay, Dorset. Adults and nymphs. EMM92:300]
- 09B: 9 September 1970 [Near Sandsend, Whitby, North Yorkshire. EMM109:167]
- 09E: 23 September 1993 [Porthallow, West Cornwall. BJENH13:106-107] 21 September 1980 [S. Stack, Anglesey. BJENH9:3-5]
- 09F: 29 September 1964 [Near Castle Martin, Pembrokeshire. PTSLENHS1965:83] 28 September 2009 [Winspit Valley, Worth Matravers, Dorset. HN15:11]
- 10B: 10 October 2012 [Gilkicker Point, VC11. Hem3:104]
- 10C: 13 October 1998 [Freshwater, Isle of Wight. BJENH12:180] 14 October 1937 [Robin Hood's Bay, North Yorkshire. EMM109:167]

# Gonocerus acuteangulatus (Goeze) (Coreidae)

- 01A: 1 January 2004 [Chappetts Copse, VC11. ERJV118:144]
- 01C: 14 January 1990 [Hill House Wood, Bookham Common, Surrey. Adult. BJENH7:175]
- 01E: 25 January 2006 [Grangelands Reserve, VC24. ERJV118:144]
- 01F: 27 January 2006 [Great Kimble, VC24. ERJV118:144]
- 03B: 8 March 2009 [Cheltenham, VC33. HN16:12]
- 04A: 1 April 1997 [Merrow Downs, near Guildford, Surrey. BJENH10:232]
- 04B: 6 April 1991 [Hill House Wood, Bookham Common, Surrey. Adults. BJENH7:175] 6 April 2013 [Shotesham, VC27. Adult. HN21:4]
- 04C: 15 April 2003 [Horniman Gardens, Surrey. BJENH16:102]
- 04D: 20 April 2013 [Nunnery Lakes, VC28. Adult. HN21:4]
- 04F: 26 April 1953 [The Downs, Ranmore, Surrey. Ent86:199]
- 05A: 2 May 1949 [Mickleham, Surrey. LondonHets]
- 05B: 8 May 1998 [Horley, Surrey. BJENH12:35]
- 05C: 11 May 1935 [Boxhill, Surrey. LondonHets]
- 05E: 23 May 1865 [Box Hill, Surrey. Males and females. EMM2:46] 24 May 1865 [Box Hill, Surrey. EMM69:234-245] 21 May 2010 [The Holies, Streatley, VC22. ERJV125:39-40]
- 05F: 31 May 2015 [Corfe Mullen, VC9. Adult. HN23:4] 30 May 2008 [Gardens of Norwich Castle, VC27. Adult. HN12:17] 26 May 2012 [Happy Valley, Chequers Reserve, Great Kimble, VC24. Adult. Hem1:19] 30 May 2015 [Woodmancote, Gloucestershire. Mating pair. HN23:10]
- 06A: 4 June 2015 [Woodmancote, Gloucestershire, Eggs. HN23:10]
- 06B: 9 June 1953 [Box Hill, Surrey. EMM89:285]
- 06C: 15 June 1997 [Epsom Downs, Surrey. BJENH11:110]
- 06E: 24 June 2015 [Woodmancote, Gloucestershire. Nymphs. HN23:10]
- 07B: 10 July 1933 [Leatherhead, Surrey. LondonHets]
- 07F: 28 July 2003 [Goose Island, Battersea Park, Surrey. Nymph. BJENH17:181-182] 30 July 2014 [TL78, Brandon, VC26. Hem3:93] 31 July 2009 [Totternhoe Quarry, VC30. Adult, nymphs and eggs. HN14:8]
- 08A: 4 August 2003 [Bournehill, near Horsham, VC13. Adults and nymphs. HN3:5]
- 08B: 8 August 2019 [North Petherton Cemetery, VC5. Nymphs reared in culture. Hem6:263] 10 August 2006 [Sinah Common, Hayling Island, South Hampshire. Nymph. BJENH20:193] 8 August 2009 [Totternhoe Quarry, VC30. Nymphs and eggs. HN14:8]
- 08C: 11 August 2015 [Church Enstone Graveyard, Oxfordshire. Nymphs reared in culture. Hem3:126] 12 August 1998 [Nonsuch Park, Cheam, Surrey. Nymphs. BJENH13:246-247] 13

- August 2006 [Wandsworth Common, London. BJENH20:213-216] 11 August 1997 [Woodlands Park, Leatherhead, Surrey. BJENH11:110]
- 08D: 19 August 2009 [Box Hill, Surrey. ERJV124:24] 20 August 1945 [Box Hill, Surrey. Nymphs. EMM82:199-200]
- 08E: 23 August 2014 [Cothill Pit, Dry Sandford, VC22. Nymphs reared in culture. Hem2:49] 24 August 2008 [Grays, VC18. Adult. HN12:16] 22 August 2009 [Near Ivinghoe Beacon, VC24. Nymphs. HN14:8] 23 August 2005 [Peartree Green, Southampton. Nymphs. HN6:14] 24 August 2005 [Westwood Woodland Park, Southampton. Adult. HN6:14]
- 08F: 27 August 1990 [Bayfield and Eastern Plain, Bookham Common, Surrey. Adult. BJENH7:175] 27 August 1990 [Bayfield and Eastern Plain, Bookham Common, Surrey. Adult. BJENH7:175] 27 August 1990 [Bayfield and Eastern Plain, Bookham Common, Surrey. Adults and nymph. BJENH7:175] 27 August 1950 [Boxhill. Including a nymph. PTSLENHS1950-51:77-78] 30 August 1948 [Boxhill, Surrey. LondonHets] 27 August 1989 [Juniper Hall. Adult. HSGN9:6] 29 August 1897 [Near Box Hill, Surrey. EMM34:13-15] 31 August 2013 [Rainbow Bridge, University Parks, Oxford, VC23. Adult. Hem1:19] 28 August 2011 [Rye Meads, VC20. Adults and nymphs. HN17/18:21] 27 August 2008 [Walthamstow, VC18. Nymphs reared in culture. HN12:16] 29 August 1993 [Wells, Epsom Common. Adult. BJENH7:175] 29 August 1993 [Wells, Epsom Common. Adults. BJENH7:175]
- 09A: 1 September 1990 [Bayfield Plain, Bookham Common, Surrey. Adults and nymphs. BJENH7:175] 3 September 2014 [Goose Green, Wolvercote, Oxford. Nymphs reared in culture. Hem2:49] 3 September 2015 [Padworth Recycling Centre. Nymph. BJENH29:69-88] 3 September 2003 [Sullington Warren, West Sussex. BJENH17:180-181] 4 September 2013 [Thrupp Lake, Radley, VC22. Adults. Hem1:19]
- 09B: 9 September 2012 [Bedford Town Park, VC30. HN19/20:11] 6 September 2002 [Edenridge, Kent. BJENH16:102]
- 09C: 15 September 1934 [Boxhill, Surrey. LondonHets] 12 September 2008 [Cheshunt Marsh, VC19. Adult. HN12:16] 15 September 2008 [Grays, VC18. Adult. HN12:16] 12 September 1953 [Headley Lane, Boxhill, Surrey. PTSLENHS1953-54:91-92] 12 September 2003 [Winchester, Bar End, VC12. HN3:5]
- 09D: 19 September 1965 [Box Hill, Surrey. PTSLENHS1965:83] 19 September 1994 [Box Hill, Surrey. EMM133:79-80] 20 September 1935 [Boxhill, Surrey. Female. LondonHets] 18 September 2012 [Gunnersbury Triangle. BJENH29:69-88]
- 09E: 22 September 1991 [Bayfield Plain, Bookham Common, Surrey. Adult. BJENH7:175] 24 September 1949 [Boxhill. PTSLENHS1949-50:78-79] 21 September 2006 [Clarefield Park, Brent, Middlesex. BJENH20:193-194] 21 September 2005 [Little Kimble Railway Station, VC24. ERJV118:144]
- 10A: 5 October 2007 [Near Marcham, Oxfordshire. Adults and nymphs. HN10:13]
- 10B: 7 October 2013 [Cheltenham, VC33. Adults. HN21:4] 8 October 2013 [Woolstone, VC33. Adult. HN21:4]
- 10C: 12 October 2010 [Park Wood, Chilham, East Kent. Adults. BJENH23:276] 15 October 2005 [Prestwood parish churchyard, VC24. ERJV118:144]
- 10D: 17 October 2013 [Bagendon, VC33. Adult. HN21:4] 19 October 1947 [Mickleham, Surrey. LondonHets]
- 11C: 12 November 1953 [Headley Lane, Surrey. LondonHets]
- 11F: 28 November 1935 [Boxhill, Surrey. Male. LondonHets]
- 12B: 8 December 2014 [Holme, Holmehurst Track, VC28. Hem4:37]

## Leptoglossus occidentalis Heidemann (Coreidae)

- 01A: 5 January 2007 [Weymouth College, Dorset. Adult. Atropos36:66-67]
- 04E: 25 April 2010 [Rippingale, VC53. Hem3:84]
- 05D: 18 May 2017 [University Parks, Oxford. Adult. BJENH30:224]
- 06C: 13 June 2009 [Abbotswood, near Stow-on-the-Wold, VC33. HN15:11]
- 08F: 30 August 2008 [Boulderwall Farm, Dungeness, Kent. BJENH22:263-264] 31 August 2009 [Dungeness Bird Observatory, Kent. BJENH22:263-264] 30 August 2008 [Dungeness, VC16.

- HN12:8] 30 August 2008 [Hastings, VC14. HN12:8] 31 August 2009 [Painter's Forstal, Kent. BJENH22:263-264] 31 August 2009 [St Michael's, Tenterden. BJENH22:263-264]
- 09A: 1 September 2009 [Ashford, Kent. BJENH22:263-264] 2 September 2009 [Colchester, VC19. HN14:9] 1 September 2009 [Felixstowe, Suffolk. HN14:9] 2 September 2009 [Gillingham, Kent. BJENH22:263-264]
- 09B: 9 September 2010 [Churchdown, Gloucester, VC33. HN16:12] 8 September 2009 [Dover Docks, Kent. BJENH22:263-264] 7 September 2009 [Dungeness Bird Observatory, Kent. BJENH22:263-264] 7 September 2010 [Immingham, VC54. Hem3:84] 8 September 2009 [Ipswich Museum, VC25. Male. HN14:9]
- 09C: 14 September 2009 [Fifth Floor, Hilton Metropole Hotel, Birmingham, VC38. Adult. HN15:11]
- 09D: 19 September 2009 [Bawdsey, East Suffolk. BJENH23:204] 19 September 2009 [Bockhill, St Margarets at Cliffe, Kent. BJENH22:263-264] 19 September 2009 [Dunwich Forest, Suffolk. HN14:9] 20 September 2009 [Minsmere, Suffolk. HN14:9] 18 September 2009 [Newington, Ramsgate, Kent. BJENH22:263-264]
- 09E: 23 September 2014 [Aylsham, VC27. Hem4:40] 25 September 2010 [Bodmin, VC2. HN16:10] 24 September 2010 [Darlington, VC66. HN16:10] 24 September 2009 [Woodstock, Sittingbourne, Kent. BJENH22:263-264]
- 09F: 27 September 2009 [Shepherdswell, Kent. BJENH22:263-264]
- 10A: 4 October 2008 [Holborn, VC21. HN12:8] 3 October 2010 [Moor Allerton, Leeds, VC64. HN16:10] 5 October 2008 [Southsea, South Hampshire. BJENH22:184] 1 October 2016 [Tetworth, Oxfordshire. BJENH30:100]
- 10B: 10 October 2009 [Bramford, Suffolk. HN14:9] 7 October 2010 [Fulford, York, VC62. HN16:10] 10 October 2009 [Lydd, Kent. BJENH22:263-264] 8 October 2010 [Lyme Regis, VC9. HN16:10] 6 October 2008 [Portsmouth, VC11. HN12:8]
- 10C: 12 October 2008 [Bonchurch, VC10. HN12:8] 11 October 2009 [Broadstairs, Thanet, Kent. BJENH22:263-264] 13 October 2008 [Dungeness, VC16. HN12:8] 12 October 2008 [Fareham, South Hampshire. BJENH22:184] 12 October 2009 [Felixstowe, Suffolk. HN14:9] 13 October 2008 [Greatstone, Kent. BJENH22:263-264] 14 October 2008 [Kendal, VC69. HN12:8] 14 October 2008 [Lancing, VC13. HN12:8] 12 October 2008 [Newhaven, VC14. HN12:8] 11 October 2008 [Portland, VC9. HN12:8] 13 October 2008 [Portland, VC9. HN12:8] 14 October 2008 [Redditch, VC37. HN12:8] 12 October 2008 [Rye, VC13. HN12:8] 13 October 2008 [Rye, VC14. HN12:8] 13 October 2008 [Southport, VC59. HN12:8] 14 October 2008 [Southview Cottages, Dungeness, Kent. BJENH22:263-264] 11 October 2010 [Stow-on-the-Wold, VC33. HN16:12]
- 10D: 19 October 2008 [Caterham, VC17. HN12:8] 19 October 2008 [Folkestone, VC15. HN12:8]
  17 October 2008 [Langton Matravers, VC9. HN12:8] 18 October 2008 [Newhaven, VC14. HN12:8] 16 October 2008 [Portland VC9. HN12:8] 18 October 2008 [Portland, VC9. HN12:8]
  19 October 2008 [Portland, VC9. HN12:8] 20 October 2009 [RSPB, The Lodge, Sandy, VC30. HN15:11] 16 October 2008 [Southwark, VC17. HN12:8]
- 10E: 25 October 2008 [Bonchurch, VC10. HN12:8] 25 October 2008 [Brighton, VC14. HN12:8]23 October 2008 [Charlesworth, VC57. HN12:8] 22 October 2008 [Felixstowe, Suffolk. HN14:9]
- 10F: 29 October 2017 [Horsell Birch, Horsell Common, near Woking, Surrey. BJENH31:118] 31 October 2009 [Lydd-on-Sea, Kent. BJENH22:263-264] 30 October 2009 [Surrey Wildlife Trust HQ, Pirbright, VC17. HN14:10] 27 October 2009 [Totland, Isle of Wight. BJENH23:204] 30 October 2009 [Totland, Isle of Wight. BJENH23:204] 26 October 2009 [Wroxall, VC10. Nymph. HN14:9]
- 11A: 1 November 2011 [Stevenage, VC20. HN17/18:21] 3 November 2009 [Wootton, Kent. BJENH22:263-264]
- 11B: 7 November 2008 [Arundel, VC13. HN12:8]
- 11C: 13 November 2015 [Wells next the Sea, VC28. Hem4:40]

Spathocera dalmanii (Schilling) (Coreidae)

04D: 16 April 1995 [Woolmer Forest, North Hampshire. Adults. EMM133:79-80]

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05D: 20 May 2006 [Upper Hollesley Common, VC25. HN13:10]
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05F: 26 May 1953 [Hounslow Heath, Middlesex. Ent87:15-18] 27 May 2005 [Near Sandy, Bedfordshire. HN5:7]

06A: 3 June 1951 [Arne Heath, Dorset. Adults *in copula*. EMM95:225] 4 June 2001 [Stokeford Heath, Dorset. BJENH15:180]

06B: 7 June 1945 [Titchfield, Hampshire. Adults. EMM81:278-279]

06C: 15 June 2009 [Lords Wood, VC11. HN14:10]

06D: 16 June 2019 [Near the level crossing north of Santon Downham, West Norfolk. Hem6:246] 18 June 2019 [Rampart Field, near Lackford, West Suffolk. Hem6:247]

06E: 21 June 2019 [Near Thetford, West Norfolk. Hem6:248] 22 June 2008 [Purdis Heath, VC25. HN13:10]

06F: 30 June 2000 [Fort Gillkicker, South Hampshire. EMM137:231-232]

07A: 4 July 1994 [Crooksbury Common, Surrey. Female. EMM133:79-80] 3 July 2006 [Hurston Warren, Storrington, West Sussex. BJENH20:193]

07F: 31 July 1901 [Byfleet, Surrey. LondonHets]

08B: 9 August 2000 [Thursley NNR, Surrey. EMM137:231-232]

08C: 15 August 1899 [Albury, Surrey. Butler1923] 12 August 1982 [Bowndown, Hampshire. PTBENHS17:18]

08E: 24 August 1996 [Maulden Wood, Bedfordshire. Adults and nymphs. EMM133:261-262] 24 August 1999 [Middlewick Ranges, Colchester, Essex. BJENH13:182]

08F: 28 August 1945 [Titchfield, Hampshire. Adults and nymphs. EMM81:278-279]

09A: 2 September 1943 [Chilworth, Surrey. LondonHets]

09C: 15 September 1996 [Sandy Heath, Bedfordshire. BJENH10:177-178]

09E: 22 September 1952 [Hounslow Heath, Middlesex. Adult. Ent86:34-40]

09F: 28 September 1994 [Woolmer Forest, North Hampshire. Adults. EMM133:79-80]

10A: 5 October 1952 [Hounslow Heath, Middlesex. Nymph. Ent86:34-40]

10B: 7 October 1951 [Epping Forest, Essex. EMM88:72]

## Syromastus rhombeus (Linnaeus) (Coreidae)

01F: 29 January 2014 [Syderstone Common NR, VC28. Hem3:93]

04C: 13 April 2004 [Penhale Dunes, Cornwall. CornwallHets]

04E: 22 April 1956 [Farningham Wood, Kent. LondonHets] 21 April 2005 [Gallions Reach, Beckton, South Essex. BJENH20:193-194]

04F: 27 April 2015 [Waterford Heath, VC20. Hem2:46]

05B: 7 May 1950 [Canvey Island, Essex. LondonHets]

05C: 12 May 1990 [Bromsberrow Heath, Gloucestershire. GloucsHets] 13 May 2006 [Pannington Hall, near Wherstead, East Suffolk. HN8:9]

05D: 17 May 2014 [South of Weavers Down, VC13. Hem6:231]

05E: 24 May 1953 [Hedgerley, near Slough, Buckinghamshire. Adult. EMM89:223]

05F: 27 May 1930 [Lelant Towans, Cornwall. TSBE1:51-84]

06A: 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236]

06C: 11 June 2003 [Deptford Creek. BJENH18:209]

06D: 18 June 2019 [Cavenham Heath, West Suffolk. Hem6:247] 17 June 2019 [Devil's Punchbowl, near Croxton, West Norfolk. Hem6:246] 17 June 2019 [Two Mile Bottom, West Norfolk. Hem6:247]

06E: 21 June 2019 [Near Thetford, West Norfolk. Hem6:248] 21 June 2019 [Near Two Mile Bottom, West Norfolk. Hem6:248]

06F: 28 June 2006 [Canvey Wick, South Essex. BJENH20:193-194]

07A: 5 July 1944 [Starcross, South Devon. Ent88:89-91] 1 July 2006 [Villa Farm quarry, Arlesford, North Essex. Nymphs. HN8:9]

07D: 16 July 2010 [Browndown coastal ranges, South Hampshire. Nymph reared in culture. BJENH24:170] 18 July 2006 [Lodgehill Training Area, West Kent. BJENH20:193-194]

07E: 24 July 1948 [Darenth, Kent. LondonHets] 23 July 1952 [Taplow, Buckinghamshire. LondonHets]

07F: 29 July 2006 [Villa Farm quarry, Arlesford, North Essex. Adults. HN8:9]

- 08A: 5 August 1934 [Worlington and Freckenham, Suffolk. Adults and nymphs. EMM71:113-114]
- 08B: 6 August 1952 [Datchet, Buckinghamshire. EMM88:255] 6 August 1952 [Hounslow Heath, Middlesex. Adult. Ent86:34-40] 10 August 2001 [Middlewick Ranges, near Colchester, North Essex. HN8:9] 10 August 2008 [Sixty Acre Wood, Chessington, Surrey. Nymph reared in culture. BJENH22:184]
- 08C: 15 August 1899 [Albury, Surrey. Butler1923] 15 August 1942 [Poole, Dorset. Adults and nymphs. EMM81:278-279]
- 08E: 21 August 1992 [Claydon quarries, VC25. HN9:13]
- 08F: 28 August 1926 [Bishopstoke, Hampshire. HantsHets] 30 August 2005 [Crystal Palace Park, West Kent. BJENH20:193-194] 27 August 1961 [Swanscombe, Kent. LondonHets] 28 August 1945 [Titchfield, Hampshire. Adults and nymphs. EMM81:278-279] 27 August 1819 [Xt. Church, Hampshire. EMM69:234-245]
- 09A: 3 September 1996 [Harbour Cove, Cornwall. CornwallHets] 3 September 1928 [Lelant Towans, Cornwall. TSBE1:51-84]
- 09B: 6 September 1919 [Rock Sandhills, Cornwall. TSBE1:51-84] 6 September 2005 [Theberton, VC25. HN9:13]
- 09C: 12 September 2015 [Gimingham Railway line, VC27. Hem4:40]
- 09D: 16 September 2006 [Thorpe-le-Soken, Essex. BJENH20:191]
- 09F: 30 September 1934 [West Hyde, Hertfordshire. LondonHets]
- 10A: 5 October 1952 [Hounslow Heath, Middlesex. Ent86:34-40]
- 11F: 28 November 1901 [Burnham, Buckinghamshire. LondonHets]
- 12A: 4 December 1930 [Imperial College Biological Field Station, Slough. Male. TSBE2:47-67]
- 12F: 26 December 1924 [Ayot, Hertfordshire. LondonHets]

#### **Detailed records**

Arenocoris fallenii (Schilling) (Coreidae)

Under Stork's-bill (*Erodium*) rosettes in disused gravel workings with predominately sandy substratum that has developed a sparse flora [Frogmore Gravel Pits, VC20. 12 May 2011. HN17/18:21]

Under Stork's-bill in disused gravel workings with predominately sandy substratum that has developed a sparse flora [Waterford Gravel Pits, VC20. 12 May 2011. HN17/18:21]

On sandhills [Deal. Whit Monday and Tuesday 1906 (4-5 June). EMM42:162-163]

Sand dunes [Braunton Burrows, North Devon. 13 June 1989. BJENH4:119-121]

At the roots of *Erodium cicutarium* [Deal. 25 June 1899. ERJV12:18-19]

Under *Erodium* rosettes [Arlesford, North Essex. 1 July 2006. BJENH20:191]

Under Erodium [Worlington and Freckenham, Suffolk. 5 August 1934. EMM71:113-114]

At the roots of *Euphorbia paralias* on sandhills [Rhossilli Bay, Glamorgan. 7 September 1950. EMM87:139]

In a sand quarry [Sandy Heath, Bedfordshire. 15 September 1996. EMM133:261-262]

Sandy, sparsely vegetated areas [Bedfordshire. BJENH18:208]

Under patches of *Erodium* [Berrow, Somerset. September 1953. Adults and nymphs. EMM91:75]

Under clumps of rest-harrow and storksbill (*Erodium cicutarium*) [Bosherston, Pembrokeshire. 1990. BJENH4:43]

Harboured by *Erodium cicutarium* [Brandon, West Suffolk. August 1906. EMM56:232]

At the roots of *Erodium cicutarium* [Breck district, Suffolk. June. SuffolkHets]

Evolved coastal dunes [Britain. S&L1959]

Coastal sandhills [British Isles. Butler1923]

Sandhills [Carmarthenshire. August. Adult and nymphs. Butler1923]

Breeding colonies in association with *Erodium* on sandhills [Coast of Devon and Cornwall. July 1957. EMM94:24]

Occurred wherever *Erodium* was to be found [Constantine Bay, Penhale, Daymer & Rock, Cornwall. June 1956. Adults and nymphs. EMM92:372-374]

Under the leaves of *Erodium cicutarium* [Deal. August and September. D&S1865]

Under *Erodium* [Deal. A black variety is found occasionally. EMM26:81-82]

Sand hills [Freshwater Bay, Pembrokeshire. 1866. EMM3:92]

Under *Erodium cicutarium* on dunes [Great Bay, St Martin's, Cornwall. 1964/65. Adults. CornwallHets]

Under *Erodium cicutarium* on sand dunes [Isles of Scilly. August. EMM102:67-69]

Under Erodium on sandhills [Kidwelly and Pendine, Carmarthenshire. EMM48:108-111]

Under Erodium cicutarium in a sandy spot [Mildenhall, Suffolk. September 1922. EMM59:15]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. May 2005. HN5:7]

Under Erodium and Ononis [Oxwich Bay, near Swansea. July/August 1925. EMM62:38-39]

From dunes [Pembrey, Carmarthenshire. August 1991. HSGN11:8]

Under *Erodium* and *Ononis* on sandhills [Pembrokeshire. Ent60:283-284]

Sand dunes [Wales. HN9:4]

In sand dunes [Whiteford Burrows, Gower coast, South Wales. 1960/1961. Ent100:157-165]

## Arenocoris waltlii (Herrich-Schaeffer) (Coreidae)

Beneath Erodium cicutarium on crag sand [Fritton, Suffolk. 19 May 1919. EMM56:232]

Under Erodium [Deal, Kent. 1 July 1931. Female. EMM68:41]

At the roots of grass in a very dry place [West Walton, Norfolk. 5 August 1901. EMM38:80]

Under Erodium [Worlington and Freckenham, Suffolk. 5 August 1934. EMM71:113-114]

Under Erodium cicutarium in a sandy spot [Mildenhall, Suffolk. September 1922. EMM59:15]

In a sandpit [Near Barham Wood, Framlingham. EMM59:138]

## Bathysolen nubilus (Fallén) (Coreidae)

Under rosette of black medick (*Medicago lupulina*) on foundations of a demolished building [The old Royal Aircraft Establishment, Farnborough, North Hampshire. 4 June 2007. Adults. BJENH20:269]

Amongst grass roots in chalk pit [Darenth, Kent. 9 June 1949. LondonHets]

In rough ruderal grassland [VC16. 20 June 2007. HN11:12]

Sweeping a ruderal area of ground rich in leguminaceous ground cover adjoining abandoned sports courts [Ewell, Priest Hill, VC17. 2 July 2009. Adults and nymphs. HN14:10]

Amongst grass roots in chalk pit [Darenth, Kent. 8 July 1950. LondonHets]

Under black medick (*Medicago lupulina*) [Clayswood, Bearsted, Kent. 24 July 1997. EMM134:265-266]

On the ground amongst sparse vegetation in a disused chalk pit [Darenth, Kent. 24 July 1948. Female and nymph. EMM85:23]

Beneath plants in a sand-pit [Near East Malling. 29 July 1945. Nymphs and adults. EMM81:278-279]

Under *Erodium* on side of chalk pit [Purfleet, South Essex. 30 August 1938. Female. EMM79:199] At roots of black medick (*Medicago lupulina*) [Swanscombe Chalk Pit, Kent. 4 September 1964. Adults and nymphs. LondonHets]

Half-buried in fine shingle at the roots of black medick (*Medicago lupulina*) on a shingle bar [Between Snettisham and Heacham, Norfolk. 10 September 1967. EMM104:256]

Half-buried in fine shingle at the roots of black medick (*Medicago lupulina*) on a shingle bar [Between Snettisham and Heacham, Norfolk. 14 September 1967. EMM104:256]

On the underside of a board on open waste ground, with sparse and low vegetation on a gravelly soil [Plumstead, Kent. 8 October 1952. Adult. EMM89:134]

Under black medick in a disused gravel-pit [Sudbury, Suffolk. 8 October 1953. Adult. EMM90:40] Sandy, sparsely vegetated areas [Bedfordshire. BJENH18:208]

On the ground in dry places with sparse vegetation [Britain. S&L1959]

From old railway sidings with sparse, ruderal vegetation on sandy ground [Cricklewood, North London, 2001 and 2002. BJENH17:15-23]

On sand-hills [Deal. August. D&S1865]

At the roots of grass on sand-hills [Deal. September 1872. EMM9:192-193]

In a pit fall trap [Frilford Heath, VC22. 2008. HN13:9]

Under black medick (*Medicago lupulina*) on waste ground [Near Slough, Buckinghamshire. June 1954. EMM90:239]

Associated with black medick on cinder-covered waste land [Slough, Buckinghamshire. 1953/1954. Ent88:10-17]

At roots of grass [Unthanks Road, Norfolk. Dead specimen. EMM25:446-447]

On open, sparsely-vegetated, cindery rubble of a former railway track [Willington, Bedfordshire. 1997. Adult. EMM134:52]

Ceraleptus lividus Stein (Coreidae)

In a solitary root of meadow fescue grass (*F. pratensis*) on a railway bank [Chobham. 23 February 1885. EMM21:277]

From brownfield site [Braeburn Park. 7 May 2014. BJENH29:69-88]

Picked up in the road [Gomshall, Surrey. 25 May 1899. EMM35:270]

Alighted on some grass [Silwood Park, Sunninghill, Berkshire. 22 May 1956. Male. EMM92:401]

Grubbing under prostrate grass in closed grassland at the base of soft cliff [White Nothe, VC9. 25 May 2005. HN7:14]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

Ex-colliery land [Near Little Houghton, Barnsley, VC63. 1 June 2014. HN22:4]

On the flowers of Hemlock Water-dropwort (*Oenanthe crocata*) [Rownhams Wood, VC11. 4 June 2007. HN14:10]

Sweeping a quarry floor [Hitchcopse Pit NR, VC22. 30 June 2009. Hem2:47]

Sand dunes [Hayling Island, Hampshire. 2 July 1983. PTBENHS17:18]

Under *Potentilla reptans* in a sand-pit [Near East Malling. 29 July 1945. Nymphs. EMM81:278-279]

Sweeping fine, dry, long grass on an artificial mound covering a water-tank in a wood [Albury, Surrey. 15 August 1899. Butler1923]

At the roots of grass on the sand-hills [Deal. 24 August 1863. Female. D&S1865]

Under hare's foot trefoil (*Trifolium arvense*) in a sand-pit [Gomshall, Surrey. 25 August 1952. Adults and nymph. EMM89:11]

Under hare's foot trefoil (*Trifolium arvense*) in a sand-pit [Taplow, Buckinghamshire. 21 August 1952. Adults. EMM89:11]

On sandhills [Deal. 1 September 1907. EMM44:61-63]

Beneath Calluna vulgaris [Ash Vale, Surrey. 10 September 1950. PTSLENHS1950-51:79-80]

Sweeping a brownfield site [Braeburn Park. 9 September 2011. BJENH29:69-88]

Grubbing under grass overhanging the base of soft cliff [Eype Mouth, VC9. 8 September 2005. Adults. HN7:14]

At the roots of dying *Trifolium campestre* on a sloping gravel-face in an old gravel-pit [Harefield, Middlesex. 15 September 1952. Adults and nymph. EMM89:11]

In a sand quarry [Sandy Heath, Bedfordshire. 15 September 1996. EMM133:261-262]

Working long moss covering the sand-hills [Camber sand-hills. 3 October 1882. EMM19:139]

On reeds in a gravel pit [Writtle, near Chelmsford, Essex. 7 October 1945. LondonHets]

At roots of grass [Grounds of Pest Infestation Laboratory, Slough. 19 October 1951. LondonHets]

In a grass tuft in a long-disused gravel pit [Near Woodham Walter, Essex. 8 November 1964. PTSLENHS1964:24]

Under Trifolium arvense [Berrow, Somerset. September 1953. Nymphs. EMM91:75]

From moss on sandhills [Camber sandhills. EMM21:19-20]

Sweeping [Chobham. Saunders1892]

At the roots of *Festuca pratensis* on a railway bank [Chobham, Surrey. February 1885. Butler1923]

On remnant of undisturbed chalk grassland [Cuxton Pit, VC16. 2005. HN6:9]

On remnant of undisturbed chalk grassland [Cuxton Pit, VC16. July 2006. HN11:12]

Associated with Black Medick and *Trifolium*, but nymphs could not be reared on these plants [Darenth & Aylesford, Kent. TSBE11:245-280]

In a disused chalk pit [Darenth, Kent. EMM85:23]

Associated with Medicago lupulina [Darenth, Kent. LondonHets]

At the roots of marram grass [Deal. Easter 1934. EMM71:113-114]

Sandhills [Deal. EMM26:81-82]

In moss on sandhills [Deal. Butler1923]

Amongst grass bents under the lowest branches of dwarf sallows on the top of the hillocks of sandhills [Deal. Butler1923]

Sandhills [Deal. Saunders1892]

At the roots of grass on sand-hills [Deal. September 1872. EMM9:192-193]

In the short grass sward of a meadow [Dudmaston, VC40. HN22:10]

At a brownfield site [Lincoln, VC53. May 2011. Adult. HN22:4]

Sweeping rough grass in a sandy field [Maulden Wood, Bedfordshire. June 1996. Adults. EMM133:261-262]

Sweeping in a wood [Near Strood. September. EMM9:193]

Under black medick on cinder-covered waste land [Slough, Buckinghamshire. 1953/1954. Adults and nymphs. Ent88:10-17]

Under *Trifolium dubium* on cinder-covered waste land [Slough, Buckinghamshire. 1953/1954. Nymphs. Ent88:10-17]

On and under corrugated tin and roofing felt pieces used to monitor reptiles [VC12. 2006-2007. HN11:12]

Under Trifolium arvense [Witley Common, Surrey. 1957/1958. Ent92:6-13]

In a road [Woking. Butler1923]

## Coreus marginatus (Linnaeus) (Coreidae)

In a garden [Burford, VC23. 19 April 2007. HN9:13]

In a patch of rough ground in a garden [Maidenhead, Berkshire. 11 May 1980. EMM116:132]

Flying freely in a disused clay-pit [Hedgerley, near Slough, Buckinghamshire. 24 May 1953. Adult. EMM89:223]

Sweeping *Rumex* [Plas Crug, Aberystwyth, Cardiganshire. 25 May 1955. Male and female. EMM92:54-64]

From Rumex [Aberystwyth, Cardiganshire. 31 May 1955. Female. EMM92:54-64]

In a garden [Maidenhead, Berkshire. 31 May 1979. EMM114:159]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. 27 May 2005. HN5:7]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

By river [River Wey, Eashing, Surrey. 4 June 1960. LondonHets]

Sweeping/beating along woodland rides and in clearings [The Chase, Broad Layings, VC12. 15 June 2015. Hem3:54]

Sweeping/beating [Great Pen Wood, VC12. 25 June 2015. Hem3:54]

Sweeping along a dismantled railway line [Helmdon, Northamptonshire. 2 July 2014. Hem2:26]

In an old Brassica seedbed overgrown with weeds [Starcross, South Devon. 5 July 1944. Ent88:89-91]

In arable fields [West Pentire, West Cornwall. 11 July 2003. BJENH18:165-170]

In garden [Freshwater, Isle of Wight. 16 July 1983. BJENH6:77]

Associated with *Rumex* in disused sand pit [Taplow, Buckinghamshire. 23 July 1952. LondonHets]

Breeding on Rumex crispus [Pershore, Worcestershire. 4 August 1985. EMM129:60]

Beneath black medick (*Medicago lupulina*) in a flooded gravel pit [Datchet, Buckinghamshire. 6 August 1952. EMM88:255]

Beating bramble (*Rubus*) [North Petherton Cemetery, VC5. 8 August 2019. Nymphs reared in culture. Hem6:263]

On roadside verge [Kenmare uplands, Kerry Way, Co Kerry. 28 August 2007. HN10:13]

On Spiraea [Macmine, Co Wexford. 31 August 1931. Nymph. IrelandHets]

On docks and sorrel [Titchfield, Hampshire. 28 August 1945. Adults and nymphs. EMM81:278-279]

Sweeping *Pteridium-Rubus* at night [Aberystwyth, Cardiganshire. 3 September 1955. EMM92:54-64]

Feeding on the calyces of *Polygonum aequale* [Messack, St Just-in-Roseland, Cornwall. 5 September 1945. Nymphs. EMM82:43]

Sucking blackberry blossom [Tiverton, Devon. 5 September 1911. Butler1923]

On Spiraea [Curraghmore Demesne, Co Waterford. 7 September 1929. IrelandHets]

On *Rumex obtusifolius* [Bingley Island, Canterbury, East Kent. 23 September 2012. EG64:146-165]

Beating vegetation clumps on a sea cliff [Porthallow, West Cornwall. 23 September 1993. BJENH13:106-107]

On dock [Allerford, Somerset. August 1928. EMM65:40-42]

From an abandoned metalliferous mine site [Binner Downs, near Leedstown, West Cornwall. 1994-2007. BJENH21:205-214]

Feeding on Rhubarb in a garden [Burford, VC23. 2006. HN8:13]

Sea beet [Carleon Cove, Cornwall. 1979. CornwallHets]

On roadside *Rubus* [Clophill, Bedfordshire. June 1948. EMM86:6-8]

On ling [Corbally, Ardmore, Co Waterford. September 1896. IrelandHets]

In coarse herbage [Dinton Pastures Country Park, Berkshire. BJENH7:118-126]

In meadows [Glengarriff, West Cork. August 1924. IrelandHets]

On or near *Rumex* [Grounds of Pest Infestation Laboratory, Slough. 1950. Adults. LondonHets]

Sweeping [Grounds of Pest Infestation Laboratory, Slough. August 1950. Nymphs. EMM87:103]

On or near dock [Grounds of Pest Infestation Laboratory, Slough. May and September 1950. Adults. EMM87:103]

On the brown seedheads of *Rumex*, and under the leaves of *Convolvulus sepium* growing among it [Grounds of the Pest Infestation Laboratory, Slough. Adults and nymphs. EMM87:308]

On *Rumex hydrolapathum* growing in shallow water. Under *Polygonum aviculare* on bare ashes of a waste tip and on bare gravel. Round stunted plants of *Rumex acetosella*. [Hounslow Heath, Middlesex. 1952. Adults and nymphs. Ent86:34-40]

Sweeping herbage by a canal [In and around Newton Abbot, South Devon. August 1937. Nymphs reared in culture. EMM74:20-21]

On heaths [Kenmare, South Kerry. July 1898. IrelandHets]

In an old orchard [Killarney, North Kerry. IrelandHets]

On the roof of a woodshed [Maidenhead, Berkshire. August 1977. EMM114:159]

Sweeping [Minehead, Somerset. August 1929. EMM66:43-44]

On Dewberry (*Rubus caesius*) in a forest [Pembrey Forest, Carmarthenshire. August 1961. EMM97:200]

On bramble and Cynoglossum [Pembrokeshire. Ent60:283-284]

On vegetation, especially dock (*Rumex* sp.), in field margins [Pencraig, near Ross-on-Wye, VC36. September 2010. HN16:13]

Dock [Perranuthnoe, Cornwall. 1996. CornwallHets]

Sunning themselves on low herbaceous plants during bright weather [Roseland district, Cornwall. September 1945. EMM82:43]

Associated with *Rumex* [Taplow, Buckinghamshire. July 1952. EMM88:255]

Chief foodplants are *Rumex*, especially *R. crispus* and *R. obtusifolius*, and in culture the bug dies in the absence of these plants [West country. Adults and nymphs. Ent88:33-36]

Sweeping [Westleton Lamb Pits, Suffolk. September 1900. SuffolkHets]

Polygonium aviculare agg [Witley Common, Surrey. 1957/1958. Ent92:6-13]

# Coriomeris denticulatus (Scopoli) (Coreidae)

Flying over chalk grassland [Booker, near High Wycombe, Buckinghamshire. 3 May 1951. LondonHets]

On Medicago lupulina [Woolwich Common, West Kent. 19 May 1999. ERJV111:204]

Flying freely in a disused clay-pit [Hedgerley, near Slough, Buckinghamshire. 24 May 1953. Adult. EMM89:223]

Flying over chalk grassland [Booker, near High Wycombe, Buckinghamshire. 3 June 1951. EMM87:236]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

On grass under privet hedge [Imperial College Biological Field Station, Slough. 3 June 1935. JSBE1:165-166]

Ovipositing on *Hieraceum* leaves [Harefield, Middlesex. 14 June 1934. Female. Ent71:148-153]

Sweeping/beating [Great Pen Wood, VC12. 25 June 2015. Hem3:54]

Sweeping a ruderal area of ground rich in leguminaceous ground cover adjoining abandoned sports courts [Ewell, Priest Hill, VC17. 2 July 2009. HN14:10]

On flowers of carrot on sunny chalky bank of cutting [Houghton Regis, Bedfordshire. 4 July 1944. EMM81:183-185]

In a disused chalkpit. In culture, supplied with several plants, but were associated mostly with black medick (*Medicago lupulina*), and feeding on the plant was seen [Darenth, Kent. 8 July 1950. Nymphs. EMM87:172-173]

At roots of *Spergularia rubra* [Galley Hill, Potton, Bedfordshire. 20 July 1947. Nymphs. EMM86:6-8]

On hare's foot trefoil (*Trifolium arvense*) in a sand-pit [Taplow, Buckinghamshire. 23 July 1952. Adults and nymphs. EMM88:255]

On a variety of plants [Taplow, Buckinghamshire. 30 July 1952. Adults and nymphs. EMM88:255]

Beneath black medick (*Medicago lupulina*) in a flooded gravel pit [Datchet, Buckinghamshire. 6 August 1952. Adults and nymphs. EMM88:255]

Sweeping fine, dry, long grass on an artificial mound covering a water-tank in a wood [Albury, Surrey. 15 August 1899. Butler1923]

On bare gravel under prostrate black medick (*Medicago lupulina*) [Hounslow Heath, Middlesex. 13 August 1952. Adult. Ent86:34-40]

Slope of downs [Redstone, Reigate, Surrey. 11 August 1898. LondonHets]

In grass in chalk pit [Harefield, Middlesex. 16 August 1933. Ent71:148-153]

In gravel pit [Datchet, Buckinghamshire. 22 August 1952. LondonHets]

Under hare's foot trefoil (*Trifolium arvense*) in a sand-pit [Gomshall, Surrey. 25 August 1952. Adults and nymphs. EMM89:11]

Under dead leaves in a sand-pit [Taplow, Buckinghamshire. 21 August 1952. Adults. EMM89:11] Under hare's foot trefoil (*Trifolium arvense*) in a sand-pit. In culture, a last instar nymph fed upon and killed an adult [Taplow, Buckinghamshire. 21 August 1952. Adults and nymphs. EMM89:11]

At roots of black medick (*Medicago lupulina*) [Swanscombe Chalk Pit, Kent. 4 September 1964. LondonHets]

At the roots of dying *Trifolium campestre* on a sloping gravel-face in an old gravel-pit [Harefield, Middlesex. 15 September 1952. Adult. EMM89:11]

Under grass tufts on a dry bank [Hounslow Heath, Middlesex. 5 October 1952. Ent86:34-40]

In large sand pit [Bexley, Kent. Before 1830. LondonHets]

In chalk cuttings, sand-pits, gravel-pits and cindery rubbish-tips [Britain. S&L1959]

On remnant of undisturbed chalk grassland [Cuxton Pit, VC16. 2005. HN6:9]

On thistles by the roadside [Darenth & Folkestone. July. D&S1865]

Sheltered maritime cliffs [Devon. Ent88:33-36]

In the short grass sward of a meadow [Dudmaston, VC40. HN22:10]

On a dead squirrel, with rostrum embedded in the flesh, and apparently feeding [East Malling, Kent. May 1945. TSBE11:245-280]

In moss on the ground [Eltham. August. D&S1865]

On plants among grassy ditches on hill slopes and along railway cuttings [Folkestone. Butler1923] Along railway cuttings [Folkestone. June. EMM6:183]

Flying and at the roots of *Stellaria media* [Grounds of Pest Infestation Laboratory, Slough. June 1950. EMM87:103]

Associated with *Trifolium* on cliffs [Isles of Scilly. August. EMM102:67-69]

Sweeping meadows [Lee, Kent. 1900. LondonHets]

On a doorstep [Lincoln. October 1900. EMM36:262]

On parth [sic] [Northfleet, Kent. July 1946. LondonHets]

In dry spots, especially quarries, on low herbs [Pembrokeshire. Ent60:283-284]

Associated with *Trifolium* [Peninnis Head, St Mary's, Cornwall. 1964/65. CornwallHets]

Associated with *Trifolium* on cliffs [Pernagie, St Martin's, Cornwall. 1964/65. CornwallHets]

Sweeping [Sandown, Isle of Wight. August. ERJV20:229-231]

Under *Medicago lupulina* and *Trifolium* on cinder-covered waste land [Slough, Buckinghamshire. 1953/1954. Adults and nymphs. Ent88:10-17]

In a disused sand pit on an area dominated by *Trifolium arvense* [Taplow, Buckinghamshire. July 1952. Adults and nymphs. LondonHets]

Sweeping grass [Weybridge, Surrey. August. LondonHets]

Under Black Medick, Hare's-foot Trefoil and other prostrate legumes [Witley Common, Surrey. 1957/1958. Ent92:6-13]

## Enoplops scapha (Fabricius) (Coreidae)

Under clumps of Matricaria [Kimmeridge Bay, Dorset. 28 June 1969. Nymphs. EMM105:171]

Coastal heath [Newdowns Head, West Cornwall. 30 June 1989. BJENH4:119-121]

Coastal heath [Tidnacombe, East Cornwall. 6 July 1989. BJENH4:119-121]

On a clump of sea mayweed growing on the face of head cliffs [Porthysgo on Llyn, Caernarvonshire. 15 July 1993. Adult and nymphs. BJENH9:3-5]

On or under mayweed on crumbling cliffs. In culture, nymphs fed on the fruiting capitula of the plant [Kimmeridge Bay, Dorset. 28 August 1956. Adults and nymphs. EMM92:300]

On a sandy cliff face [Near Sandsend, Whitby, North Yorkshire. 9 September 1970. EMM109:167]

Beating vegetation clumps on a sea cliff [Porthallow, West Cornwall. 23 September 1993. BJENH13:106-107]

Cliffs [S. Stack, Anglesey. 21 September 1980. BJENH9:3-5]

Crawling out of vegetation and up the vertical stone wall of a quarry to a height of up to 1 metre and disappearing into cracks [Winspit Valley, Worth Matravers, Dorset. 28 September 2009. HN15:11]

On the coast with mixed sparse vegetation, such as sandhills and cliff faces [Britain. S&L1959] Associated with ox-eye daisy (*Chrysanthemum leucanthemum*) on cliffs of crumbling grey slate [Broad Haven, St Bride's Bay, Pembrokeshire. 1963. Adults and nymphs. EMM99:166]

Under beach vegetation [Brownsea Island, Poole Harbour, Dorset. 2006-2007. EG60:37-71] In the Warren [Folkestone. EMM26:81-82]

In grassy patches on hill slopes and on railway cuttings [Folkestone. Butler1923]

On the ground in dry places along the coast [Isle of Wight. HantsHets]

Amongst luxurient tufts of *Matricaria* [Kimmeridge Bay, Dorset. August 1904. Adults and nymphs. Butler1923]

On sea beat [Little Cove, Caerleon, Cornwall. 1979. CornwallHets]

Ononis [Scarborough. D&S1865]

On the leaves of coltsfoot on the cliffs [Seaton, South Devon. PSLENHS1897:143]

Feeds on mayweed (*Matricaria*) on slow-eroding cliffs [South-west Wales and the Llyn peninsula. HN9:4]

Under cliffs [St Margaret's Bay. EMM26:81-82]

At the roots of ragwort on sandhills. In culture, nymphs reared to adult on this plant [Tenby, South Wales. Adults and nymphs. EMM88:22]

Running amongst scanty, dry vegetation on the face of slaty cliffs [Trebarwith Strand, Cornwall. Butler1923]

On water butt in garden [Tresillian, Cornwall. 1929. Adult. CornwallHets]

Amongst stout grasses on a very dry bank [Yarmouth, Isle of Wight. Butler1923]

Gonocerus acuteangulatus (Goeze) (Coreidae)

Beating conifers [Chappetts Copse, VC11. 1 January 2004. ERJV118:144]

Beating holly [Hill House Wood, Bookham Common, Surrey. 14 January 1990. Adult. BJENH7:175]

Beating juniper (*Juniperus communis*) [Grangelands Reserve, VC24. 25 January 2006. ERJV118:144]

Beating Leyland Cypress in a garden [Great Kimble, VC24. 27 January 2006. ERJV118:144] In a garden [Cheltenham, VC33. 8 March 2009. HN16:12]

On a juniper bush [Merrow Downs, near Guildford, Surrey. 1 April 1997. BJENH10:232]

Beating holly beneath mature oak [Hill House Wood, Bookham Common, Surrey. 6 April 1991. Adults. BJENH7:175]

Beating Lawson's cypress [Horniman Gardens, Surrey. 15 April 2003. BJENH16:102]

Beating beech [The Downs, Ranmore, Surrey. 26 April 1953. Ent86:199]

On yew [Mickleham, Surrey. 2 May 1949. LondonHets]

On a roadside verge [Horley, Surrey. 8 May 1998. BJENH12:35]

Beating box [Box Hill, Surrey. 23 May 1865. Males and females. EMM2:46]

Sweeping low vegetation under the shade of beech trees (*Fagus*) [The Holies, Streatley, VC22. 21 May 2010. ERJV125:39-40]

On a cherry tree (*Prunus*) [Gardens of Norwich Castle, VC27. 30 May 2008. Adult. HN12:17]

Beating Box (*Buxus sempervirens*) [Happy Valley, Chequers Reserve, Great Kimble, VC24. 26 May 2012. Adult. Hem1:19]

On the Rose *Rosa rugosa* in a garden [Woodmancote, Gloucestershire. 30 May 2015. Mating pair. HN23:10]

On the Rose *Rosa rugosa* in a garden [Woodmancote, Gloucestershire. 4 June 2015. Eggs. HN23:10]

Beating a box tree [Box Hill, Surrey. 9 June 1953. EMM89:285]

On the Rose *Rosa rugosa* in a garden [Woodmancote, Gloucestershire. 24 June 2015. Nymphs. HN23:10]

Beating Lawson's cypress (*Chamaecyparis lawsoniana*) [Goose Island, Battersea Park, Surrey. 28 July 2003. Nymph. BJENH17:181-182]

On a Buckthorn bush (*Rhamnus cathartica*) in a disused chalk quarry. Eggs were laid on the leaves. In culture, the nymphs did not survive beyond the second instar [Totternhoe Quarry, VC30. 31 July 2009. Adult, nymphs and eggs. HN14:8]

On hawthorn and on old plum trees in an orchard [Bournehill, near Horsham, VC13. 4 August 2003. Adults and nymphs. HN3:5]

Beating [North Petherton Cemetery, VC5. 8 August 2019. Nymphs reared in culture. Hem6:263]

Beating sycamore (*Acer Pseudoplatanus*) foliage [Sinah Common, Hayling Island, South Hampshire. 10 August 2006. Nymph. BJENH20:193]

On a Buckthorn bush (*Rhamnus cathartica*) in a disused chalk quarry [Totternhoe Quarry, VC30. 8 August 2009. Nymphs and eggs. HN14:8]

From Box (*Buxus sempervirens*) [Church Enstone Graveyard, Oxfordshire. 11 August 2015. Nymphs reared in culture. Hem3:126]

On hawthorn in a hedge [Nonsuch Park, Cheam, Surrey. 12 August 1998. Nymphs. BJENH13:246-247]

Beating alder buckthorn [Wandsworth Common, London. 13 August 2006. BJENH20:213-216]

Beating a box hedge on a hillside [Box Hill, Surrey, 19 August 2009, ERJV124:24]

On a box-bush [Box Hill, Surrey. 20 August 1945. Nymphs. EMM82:199-200]

From Hawthorn (*Crataegus*) [Cothill Pit, Dry Sandford, VC22. 23 August 2014. Nymphs reared in culture. Hem2:49]

On a Mahonia bush in a garden [Grays, VC18. 24 August 2008. Adult. HN12:16]

On a Box bush (*Buxus sempervirens*) [Near Ivinghoe Beacon, VC24. 22 August 2009. Nymphs. HN14:8]

Beating Hawthorn [Peartree Green, Southampton. 23 August 2005. Nymphs. HN6:14]

Off Hawthorn [Westwood Woodland Park, Southampton. 24 August 2005. Adult. HN6:14]

Beating oak [Bayfield and Eastern Plain, Bookham Common, Surrey. 27 August 1990. Adult. BJENH7:175]

Beating yew [Bayfield and Eastern Plain, Bookham Common, Surrey. 27 August 1990. Adult. BJENH7:175]

Beating hawthorn [Bayfield and Eastern Plain, Bookham Common, Surrey. 27 August 1990. Adults and nymph. BJENH7:175]

On hawthorn [Boxhill. 27 August 1950. Including a nymph. PTSLENHS1950-51:77-78]

Beating yew [Juniper Hall. 27 August 1989. Adult. HSGN9:6]

Beating box [Near Box Hill, Surrey. 29 August 1897. EMM34:13-15]

Beating Box [Rainbow Bridge, University Parks, Oxford, VC23. 31 August 2013. Adult. Hem1:19]

On Hawthorn (*Crataegus monogyna*) [Rye Meads, VC20. 28 August 2011. Adults and nymphs. HN17/18:21]

Beating rose scrub [Walthamstow, VC18. 27 August 2008. Nymphs reared in culture. HN12:16]

Beating hawthorn [Wells, Epsom Common. 29 August 1993. Adult. BJENH7:175]

Beating wild rose [Wells, Epsom Common. 29 August 1993. Adults. BJENH7:175]

Beating hawthorn [Bayfield Plain, Bookham Common, Surrey. 1 September 1990. Adults and nymphs. BJENH7:175]

From Yew (*Taxus baccata*) [Goose Green, Wolvercote, Oxford. 3 September 2014. Nymphs reared in culture. Hem2:49]

Sweeping dense herbage on a brownfield site [Padworth Recycling Centre. 3 September 2015. Nymph. BJENH29:69-88]

Beating large fruiting hawthorn (*Crataegus*) bush [Sullington Warren, West Sussex. 3 September 2003. BJENH17:180-181]

Beating Hawthorn (*Crataegus*) [Thrupp Lake, Radley, VC22. 4 September 2013. Adults. Hem1:19]

From along perennial flower bed in an ornamental park [Bedford Town Park, VC30. 9 September 2012. HN19/20:11]

Beating hawthorn [Edenridge, Kent. 6 September 2002. BJENH16:102]

Beating rose scrub [Cheshunt Marsh, VC19. 12 September 2008. Adult. HN12:16]

On Box in a garden [Grays, VC18. 15 September 2008. Adult. HN12:16]

Beating ivy [Headley Lane, Boxhill, Surrey. 12 September 1953. PTSLENHS1953-54:91-92]

On hawthorn [Winchester, Bar End, VC12. 12 September 2003. HN3:5]

Beating box bushes [Box Hill, Surrey. 19 September 1994. EMM133:79-80]

Sweeping a brownfield site [Gunnersbury Triangle. 18 September 2012. BJENH29:69-88]

Beating aspen [Bayfield Plain, Bookham Common, Surrey. 22 September 1991. Adult. BJENH7:175]

Brownfield site [Clarefield Park, Brent, Middlesex. 21 September 2006. BJENH20:193-194]

On a mixed hedge [Little Kimble Railway Station, VC24. 21 September 2005. ERJV118:144]

On large, old Box bushes in parkland [Near Marcham, Oxfordshire. 5 October 2007. Adults and nymphs. HN10:13]

On Box [Cheltenham, VC33. 7 October 2013. Adults. HN21:4]

On Box [Woolstone, VC33. 8 October 2013. Adult. HN21:4]

From a heavily fruiting hawthorn (*Crataegus monogyna*) [Park Wood, Chilham, East Kent. 12 October 2010. Adults. BJENH23:276]

Sunning on a cherry-laurel hedge [Prestwood parish churchyard, VC24. 15 October 2005. ERJV118:144]

On Box [Bagendon, VC33. 17 October 2013. Adult. HN21:4]

Beating ivy [Headley Lane, Surrey. 12 November 1953. LondonHets]

On hawthorn [Bookham Common. Nymphs. HSGN11:2]

On box [Box Hill. July and August 1868. EMM34:13-15]

On box trees [Box Hill, Surrey. May. D&S1865]

Associated with box [Box Hill, Surrey. S&L1959]

On yew [Boxhill, Surrey. August 1959. LondonHets]

Associated with the box tree [Boxhill, Surrey. LondonHets]

On Box-trees [Boxhill, Surrey. Saunders1892]

On yew [Boxhill, Surrey. October 1910. LondonHets]

Beating box and yew [Boxhill, Surrey. October 1917. LondonHets]

Box-trees [British Isles. EMM54:132-136]

From Leyland Cypress (*Cupressocyparis leylandii*) in a garden [Buckinghamshire. 2005-2006. BJENH20:192]

From mixed woodland on clay [Buckinghamshire. 2005-2006. BJENH20:192]

From deciduous woodland on chalk [Buckinghamshire. 2005-2006. BJENH20:192]

On box bushes in a churchyard [Burford, VC23. HN14:10]

Mature Box trees or hedges [Gloucestershire. October 2013. HN22:8]

From Juniper (*Juniperus communis*) on chalk downland [Grangelands SSSI, Buckinghamshire. 2005-2006. BJENH20:192]

In a house. Feeding observed on a cherry tomato in culture [Ham, Surrey. December 1998. BJENH12:91]

On hawthorn [Hook Common, VC12. 2003. Adults and nymphs. HN3:5]

Beating hawthorn [Merrit's Cottage, Bookham Common, Surrey. Nymphs reared in culture. BJENH7:175]

On ivy flowers [Near Box Hill, Surrey. October. S&L1959]

On hawthorn (Crataegus) and buckthorn (Rhamnus) in hedgerows [VC22. 2003. HN3:6]

On Box (Buxus sempervirens) in churchyards [VC33. 2009. Adults and nymphs. HN16:12]

# Leptoglossus occidentalis Heidemann (Coreidae)

In a classroom [Weymouth College, Dorset. 5 January 2007. Adult. Atropos36:66-67]

On a larch tree (Larix) [University Parks, Oxford. 18 May 2017. Adult. BJENH30:224]

In a garden [Abbotswood, near Stow-on-the-Wold, VC33. 13 June 2009. HN15:11]

At light [Boulderwall Farm, Dungeness, Kent. 30 August 2008. BJENH22:263-264]

MV light [Dungeness, VC16. 30 August 2008. HN12:8]

MV light [Hastings, VC14. 30 August 2008. HN12:8]

At MV light [Painter's Forstal, Kent. 31 August 2009. BJENH22:263-264]

On a second floor office window [Colchester, VC19. 2 September 2009. HN14:9]

On pavement [Felixstowe, Suffolk. 1 September 2009. HN14:9]

At window [Gillingham, Kent. 2 September 2009. BJENH22:263-264]

On a kitchen window [Churchdown, Gloucester, VC33. 9 September 2010. HN16:12]

In a store room [Ipswich Museum, VC25. 8 September 2009. Male. HN14:9]

Alive in a hotel room [Fifth Floor, Hilton Metropole Hotel, Birmingham, VC38. 14 September 2009. Adult. HN15:11]

At MV light [Bawdsey, East Suffolk. 19 September 2009. BJENH23:204]

At light [Bockhill, St Margarets at Cliffe, Kent. 19 September 2009. BJENH22:263-264]

In a house [Bodmin, VC2. 25 September 2010. HN16:10]

In a house [Darlington, VC66. 24 September 2010. HN16:10]

At window [Woodstock, Sittingbourne, Kent. 24 September 2009. BJENH22:263-264]

Terrace on 8th floor [Holborn, VC21. 4 October 2008. HN12:8]

On wall illuminated by MV light [Southsea, South Hampshire. 5 October 2008. BJENH22:184]

Entering a house [Tetworth, Oxfordshire. 1 October 2016. BJENH30:100]

Indoors [Bramford, Suffolk. 10 October 2009. HN14:9]

MV light [Portsmouth, VC11. 6 October 2008. HN12:8]

MV light [Bonchurch, VC10. 12 October 2008. HN12:8]

MV light [Dungeness, VC16. 13 October 2008. HN12:8]

At MV light [Fareham, South Hampshire. 12 October 2008. BJENH22:184]

Indoors on bedroom window [Felixstowe, Suffolk. 12 October 2009. HN14:9]

In house [Kendal, VC69. 14 October 2008. HN12:8]

On house window [Lancing, VC13. 14 October 2008. HN12:8]

MV light [Newhaven, VC14. 12 October 2008. HN12:8]

MV light [Portland, VC9. 11 October 2008. HN12:8]

Observation patio of bird observatory [Portland, VC9. 13 October 2008. HN12:8]

MV light [Quorn, VC55. 12 October 2008. HN12:8]

In house [Redditch, VC37. 14 October 2008. HN12:8]

House wall [Rye, VC13. 12 October 2008. HN12:8]

MV light [Rye, VC14. 13 October 2008. HN12:8]

In house [Southport, VC59. 13 October 2008. HN12:8]

At house [Southview Cottages, Dungeness, Kent. 14 October 2008. BJENH22:263-264]

In house [Caterham, VC17. 19 October 2008. HN12:8]

On car [Folkestone, VC15. 19 October 2008. HN12:8]

In flight in garden [Langton Matravers, VC9. 17 October 2008. HN12:8]

MV light [Newhaven, VC14. 18 October 2008. HN12:8]

MV light [Portland VC9. 16 October 2008. HN12:8]

Observation garden of bird observatory [Portland, VC9. 18 October 2008. HN12:8]

Observation garden of bird observatory [Portland, VC9. 19 October 2008. HN12:8]

In offices [RSPB, The Lodge, Sandy, VC30. 20 October 2009. HN15:11]

In house [Bonchurch, VC10. 25 October 2008. HN12:8]

In house [Brighton, VC14. 25 October 2008. HN12:8]

In greenhouse [Charlesworth, VC57. 23 October 2008. HN12:8]

Plastic bin at factory [Felixstowe, Suffolk. 22 October 2008. HN14:9]

Sweeping [Horsell Birch, Horsell Common, near Woking, Surrey. 29 October 2017. BJENH31:118]

In a tool store [Surrey Wildlife Trust HQ, Pirbright, VC17. 30 October 2009. HN14:10]

At MV light [Totland, Isle of Wight. 27 October 2009. BJENH23:204]

At MV light [Totland, Isle of Wight. 30 October 2009. BJENH23:204]

On a kitchen door [Wroxall, VC10. 26 October 2009. Nymph. HN14:9]

In a house bathroom [Stevenage, VC20. 1 November 2011. HN17/18:21]

At house window [Wootton, Kent. 3 November 2009. BJENH22:263-264]

On window [Arundel, VC13. 7 November 2008. HN12:8]

In a house [Cwmbran, VC35. HN16:10]

Found dead in classroom [Folkestone Harevey Grammar School, Kent. October 2009. BJENH22:263-264]

In a light trap [Kilkeel, Co Down. October 2014. HN22:12]

In a building [RSPB, Sandy, VC30. 2010. HN16:10]

At light traps [South coast of England. Late summer 2008. Adults. Atropos36:66-67]

In a garage [Stow-on-the-Wold, VC33. October 2008. HN16:12]

Beating Norway Spruce (*Picea abies*) [VC22/23. 2010. HN16:12]

# Spathocera dalmanii (Schilling) (Coreidae)

On an old fire site [Woolmer Forest, North Hampshire. 16 April 1995. Adults. EMM133:79-80]

Associated with Rumex acetosella [Hounslow Heath, Middlesex. 26 May 1953. Ent87:15-18]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. 27 May 2005. HN5:7]

At the roots of *Rumex acetosella* growing in an abandoned piggery [Arne Heath, Dorset. 3 June 1951. Adults *in copula*. EMM95:225]

Under dried-up *Spergularia* and among dead sorrel in a sand-pit [Titchfield, Hampshire. 7 June 1945. Adults. EMM81:278-279]

Ascending Sheep's Sorrel (Rumex acetosella) [Lords Wood, VC11. 15 June 2009. HN14:10]

Sweeping disturbed, sandy ground with sorrel and heather/heath [Near the level crossing north of Santon Downham, West Norfolk. 16 June 2019. Hem6:246]

Sweeping an area dominated by sorrel and heather/heath [Rampart Field, near Lackford, West Suffolk. 18 June 2019. Hem6:247]

Sweeping areas of sorrel and heather/heath amid a dirt-bike track, and mixed vegetation at the perimeter [Near Thetford, West Norfolk. 21 June 2019. Hem6:248]

Amongst a patch of *Rumex acetosella* on a sandy firebreak [Crooksbury Common, Surrey. 4 July 1994. Female. EMM133:79-80]

Sweeping sheep's sorrel (*Rumex acetosella*) growing on a recently created sandy bank [Hurston Warren, Storrington, West Sussex. 3 July 2006. BJENH20:193]

In acid grassland [Thursley NNR, Surrey. 9 August 2000. EMM137:231-232]

Sweeping fine, dry, long grass on an artificial mound covering a water-tank in a wood [Albury, Surrey. 15 August 1899. Butler1923]

At roots of sorrel [Bowndown, Hampshire. 12 August 1982. PTBENHS17:18]

Suction-sampling bare, sandy ground with *Rumex acetosella* [Middlewick Ranges, Colchester, Essex. 24 August 1999. BJENH13:182]

Clustered around sorrel in a sand-pit [Titchfield, Hampshire. 28 August 1945. Adults and nymphs. EMM81:278-279]

In a partly vegetated sand quarry [Sandy Heath, Bedfordshire. 15 September 1996. BJENH10:177-178]

Under *Rumex acetosella* on charred ground [Hounslow Heath, Middlesex. 22 September 1952. Adult. Ent86:34-40]

On an old fire site [Woolmer Forest, North Hampshire. 28 September 1994. Adults. EMM133:79-80]

In a mat of *Rumex acetosella* and *Galium hercynicum* [Hounslow Heath, Middlesex. 5 October 1952. Nymph. Ent86:34-40]

Sieving dead leaves and debris on rough, open ground [Epping Forest, Essex. 7 October 1951. EMM88:72]

On recently disturbed heathland [Albury Heath, Surrey. June 1996. EMM133:175-176]

Sweeping [Albury, Surrey. 1899. EMM79:255]

Sandy, sparsely vegetated areas [Bedfordshire. BJENH18:208]

On recently disturbed heathland [Blackheath, Surrey. June 1996. EMM133:175-176]

On established dunes [Blakeney Point, Norfolk. September. HN10:5]

On partially shaded sorrel [Crooksbury Common, Surrey. September. Nymphs. EMM133:79-80]

On bare ground amongst dead leaves and vegetable debris near the roots of tufts of grass [Farley Heath, Surrey. August 1896. Butler1923]

Crawling on a bare, arid plateau [Foxhall, Suffolk. SuffolkHets]

Where moss and Wood Sorrel (*Rumex acetosella*) grow in the sun on sand. [Greensand Ridge, VC30. HN11:15]

Beneath *Rumex acetosella* on charred ground [Hounslow Heath, Middlesex. 1952. Adult and nymph. LondonHets]

Sweeping low ridges dominated by moss with scattered Sheep-sorrel and lichen, in a hayfield on sand [Maulden Wood, Bedfordshire. June 1996. Adults. EMM133:261-262]

On sandy ground. Associated primarily with sorrel, occasionally under heather or at the roots of dry grass, preferring areas of dead or bare-stemmed sorrel amongst debris [Near Chilworth, Surrey. 1943. EMM79:255]

In a sand quarry [Sandy Heath, Bedfordshire. September 1996. EMM133:261-262]

On thin, bare soil between patches of low vegetation growing on a sea wall [Seafield Bay, Stutton, VC25. Adults and nymphs. HN12:17]

On a previously burnt area of acid grassland [VC19. HN12:17]

At a disused gravel pit [VC19. HN12:17]

From an area of dry, acid grassland [Wanstead Flats, Epping Forest, VC18. August 2008. Adult and nymphs. HN13:9]

Under moss, on a sandy hillock [Weybridge, Surrey. August 1863. D&S1865]

Syromastus rhombeus (Linnaeus) (Coreidae)

Brownfield site [Gallions Reach, Beckton, South Essex. 21 April 2005. BJENH20:193-194]

Climbing a blade of grass in a former sand and gravel quarry [Waterford Heath, VC20. 27 April 2015. Hem2:46]

On the edge of woodland by a track [Pannington Hall, near Wherstead, East Suffolk. 13 May 2006. HN8:9]

Sweeping acid grassland [South of Weavers Down, VC13. 17 May 2014. Hem6:231]

Flying freely in a disused clay-pit [Hedgerley, near Slough, Buckinghamshire. 24 May 1953. Adult. EMM89:223]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

In pitfall trap in derelict ground [Deptford Creek. 11 June 2003. BJENH18:209]

Sweeping short, mixed vegetation dominated by sorrel and heather/heath [Cavenham Heath, West Suffolk. 18 June 2019. Hem6:247]

Sweeping along a track through a clearing and wood [Devil's Punchbowl, near Croxton, West Norfolk. 17 June 2019. Hem6:246]

Sweeping along a woodland ride [Two Mile Bottom, West Norfolk. 17 June 2019. Hem6:247]

Sweeping areas of sorrel and heather/heath amid a dirt-bike track, and mixed vegetation at the perimeter [Near Thetford, West Norfolk. 21 June 2019. Hem6:248]

Sweeping a track through woodland and clearing [Near Two Mile Bottom, West Norfolk. 21 June 2019. Hem6:248]

Brownfield site [Canvey Wick, South Essex. 28 June 2006. BJENH20:193-194]

In an old Brassica seedbed overgrown with weeds [Starcross, South Devon. 5 July 1944. Ent88:89-91]

Beneath a dried-up plant of chickweed (*Stellaria*). Failed to rear the nymph in culture on this plant [Villa Farm quarry, Arlesford, North Essex. 1 July 2006. Nymphs. HN8:9]

On Nottingham Catchfly at night [Browndown coastal ranges, South Hampshire. 16 July 2010. Nymph reared in culture. BJENH24:170]

Brownfield site [Lodgehill Training Area, West Kent. 18 July 2006. BJENH20:193-194]

In disused chalk pit [Darenth, Kent. 24 July 1948. LondonHets]

On *Trifolium arvense* in disused sand pit [Taplow, Buckinghamshire. 23 July 1952. LondonHets] Sweeping sparse vegetation [Villa Farm quarry, Arlesford, North Essex. 29 July 2006. Adults. HN8:9]

Beneath black medick (*Medicago lupulina*) in a flooded gravel pit [Datchet, Buckinghamshire. 6 August 1952. EMM88:255]

Under Calluna [Hounslow Heath, Middlesex. 6 August 1952. Adult. Ent86:34-40]

Sweeping dry, sparsely-vegetated ground behind rifle range [Middlewick Ranges, near Colchester, North Essex. 10 August 2001. HN8:9]

Sweeping woodland edge. In culture, fed on unripe fruits of *Cochlearia danica* and *Cerastium fontanum* [Sixty Acre Wood, Chessington, Surrey. 10 August 2008. Nymph reared in culture. BJENH22:184]

Sweeping fine, dry, long grass on an artificial mound covering a water-tank in a wood [Albury, Surrey. 15 August 1899. Butler1923]

On Spergularia rubra [Poole, Dorset. 15 August 1942. Adults and nymphs. EMM81:278-279]

Brownfield site [Crystal Palace Park, West Kent. 30 August 2005. BJENH20:193-194]

On *Spergularia rubra* in a sand-pit [Titchfield, Hampshire. 28 August 1945. Adults and nymphs. EMM81:278-279]

On fat hen [Theberton, VC25. 6 September 2005. HN9:13]

Flew into house window on sunny afternoon [Thorpe-le-Soken, Essex. 16 September 2006. BJENH20:191]

On a waste tip [Hounslow Heath, Middlesex. 5 October 1952. Ent86:34-40]

Flying [Imperial College Biological Field Station, Slough. 4 December 1930. Male. TSBE2:47-67]

Sandy, sparsely vegetated areas [Bedfordshire, BJENH18:208]

On common toadflax [Cuxton Pit, VC16. 2005. Adults. HN6:9]

On disturbed ground and undisturbed chalk grassland on a quarry rim [Cuxton Pit, VC16. 2005. Adults and nymphs. HN6:9]

In a disused chalk pit [Darenth, Kent. EMM85:23]

Amongst grass bents under the lowest branches of dwarf sallows on the top of the hillocks of sandhills [Deal. Butler1923]

At the roots of grass on sand-hills [Deal. September 1872. EMM9:192-193]

Feeds on *Cerastium vulgatum* [Devon. Ent88:33-36]

On coastal sand-dunes and inland dry grassy places [Devon/Cornwall. Ent88:33-36]

On a grass bank [Freshwater West, Pembrokeshire. EMM88:22]

In a sandpit. Reared to adult in culture on garden plants. Seen to feed on mignonette [Gomshall, Surrey. August 1890. Nymph reared in culture. Butler1923]

From nettle and sweeping herbs and grasses [Grounds of Pest Infestation Laboratory, Slough. May and June 1950. EMM87:103]

Flying [Grounds of Pest Infestation Laboratory, Slough. September 1950. Adult. EMM87:103] On nettle [Grounds of Pest Infestation Laboratory, Slough. Summer 1950. Nymphs. EMM87:103] Under *Cerastium semidecandrum* on a waste tip [Hounslow Heath, Middlesex. Nymphs. Ent87:15-18]

Under dry plantain leaves [Lake, Isle of wight. EMM60:117-118]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. May 2005. HN5:7]

Sweeping low herbage [Rotherfield Peppard, Oxon. May. EMM77:101-104]

Suction sampling stonecrop on graves in a cemetery [Salisbury, Wiltshire. 2016. Adult. BJENH31:38-39]

Under *Cerastium vulgatum* on cinder-covered waste land [Slough, Buckinghamshire. 1953/1954. Adults and nymphs. Ent88:10-17]

In mangold fields [South Devon. Ent88:33-36]

Under heath [St George's Down, Isle of Wight. EMM60:117-118]

On hare's foot trefoil (*Trifolium arvense*) in a sand-pit [Taplow, Buckinghamshire. July 1952. EMM88:255]

Sand dunes [Wales. HN9:4]

From an old railway station [Willington, VC30. 2007. HN11:15]

Under Cerastium [Witley Common, Surrey. 1957/1958. Ent92:6-13]

# **Bibliography**

Arenocoris fallenii (Schilling) (Coreidae)

- as A. falleni EMM81:253-273
- as Aren. fallenii EMM91:7-27
- as Arenocoris falleni BJENH18:208, BJENH20:191, BJENH26:45-46, BJENH4:119-121, BJENH4:43, CornwallHets, EMM102:67-69, EMM133:261-262, EMM134:52, EMM147:213-221, EMM87:139, EMM89:17, EMM89:212, EMM91:75, EMM92:372-374, EMM92:54-64, EMM94:24, Ent100:157-165, GloucsHets, HN19/20:11, HN5:7, HN9:15, HN9:4, HSGN1:5, HSGN11:9, HSGN13:1, LondonHets, PTBENHS19:55, PTSLENHS1962:123-183, S&L1959
- as *Arenocoris fallenii* Hem1:3, Hem1:42, Hem1:43, Hem1:93, Hem2:13, Hem2:31, Hem3:2, Hem3:93, Hem4:102, Hem4:131, Hem4:2, Hem4:27, Hem4:37, Hem4:40, Hem4:68, Hem5:102, Hem5:120, Hem5:192, Hem5:2, Hem5:26, Hem5:93, Hem6:22, Hem6:283, HN10:5, HN17/18:21, HSGN11:8, TSBE11:245-280
- as Pseudophlaeas falleni Ent36:270
- as Pseudophlaeus falenii ERJV12:18-19
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- as Pseudophlaeus Falleni EMM36:94-101
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- as Pseudophloeus Falleni EMM7:137-138
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- as *Pseudophloeus fallenii* Butler1923, EMM43:196-202, EMM68:41, EMM71:113-114, Ent60:283-284, HantsHets
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Arenocoris waltlii (Herrich-Schaeffer) (Coreidae)

- as A. waltli EMM81:253-273
- as Aren. waltlii EMM91:7-27
- as Arenocoris walti HN9:2

- as *Arenocoris waltli* BJENH25:205-215, BJENH26:45-46, HSGN1:4, HSGN8:8, PTSLENHS1956:111-136, PTSLENHS1962:123-183, S&L1959
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- as Pseudophloeus waltli EMM56:232, EMM59:138, EMM59:15
- as Pseudophloeus waltlii Butler1923, EMM43:196-202, EMM68:41, EMM71:113-114, HantsHets
- as Pseudophloeus Waltlii EMM38:80

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- as B. nubilus EMM81:253-273
- as Bath. nubilus EMM91:7-27
- as *Bathysolen nubilis* BJENH17:15-23, BJENH20:269, EMM134:265-266, EMM137:231-232, EMM90:239, EMM95:225, Ent88:10-17, HN11:12
- as *Bathysolen nubilus* BJENH18:208, BJENH20:269, Butler1923, EMM104:256, EMM134:52, EMM25:446-447, EMM36:94-101, EMM79:199, EMM81:278-279, EMM85:152-156, EMM85:23, EMM89:134, EMM90:40, Ent95:137-143, HantsHets, Hem1:3, Hem1:42, Hem1:43, Hem1:93, Hem3:2, Hem3:40, Hem4:102, Hem4:131, Hem4:2, Hem4:27, Hem4:40, Hem4:68, Hem5:102, Hem5:149, Hem5:192, Hem5:2, Hem5:26, Hem5:54, Hem6:22, HN11:12, HN14:10, HSGN8:8, LondonHets, PTSLENHS1949-50:38, PTSLENHS1956:111-136, PTSLENHS1962:123-183, PTSLENHS1966:118, S&L1959, Saunders1892, Synopsis1875, TSBE11:245-280, TSBE16:1-48
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- as *Syromastes marginatus* Butler1923, D&S1865, EMM2:270-272, EMM26:81-82, EMM39:17-18, EMM44:22-29, EMM51:220, EMM64:109-113, EMM65:40-42, EMM66:43-44, EMM69:234-245, EMM74:20-21, Ent47:146-147, Ent60:283-284, ERJV15:134, ERJV42:49-51, HantsHets, IrelandHets, PTSLENHS1935-36:27-28, Saunders1892, SuffolkHets, Synopsis1875, TSBE1:51-84

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- as C. denticulatus EMM81:253-273, EMM82:94-95
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#### Spathocera dalmanii (Schilling) (Coreidae)

- as Atractus Dalmanii Synopsis1875
- as S. dahlmannii EMM81:253-273
- as Spath. dahlmannii EMM91:7-27
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- as Spathocera dahlmanii PTBENHS17:18
- as *Spathocera dahlmanni* BJENH10:177-178, BJENH13:182, BJENH15:180, BJENH18:208, BJENH20:193, BJENH25:205-215, EMM120:253-258, EMM133:175-176, EMM133:261-262, EMM133:79-80, EMM134:265-266, EMM137:231-232, EMM95:225, ERJV111:27-35, ERJV81:160-163, HN11:14, HN4:3, HN9:2, HSGN1:5, HSGN13:1, LondonHets, PTSLENHS1962:123-183, S&L1959
- as *Spathocera dahlmannii* EMM79:255, EMM81:278-279, EMM85:152-156, EMM88:72, EMM89:212, Ent87:15-18, HN14:10, LondonHets, TSBE11:245-280
- as Spathocera dalmani Butler1923, Ent91:100, HantsHets, HN13:10, HN5:7
- as Spathocera Dalmani D&S1865
- as *Spathocera dalmanii* BJENH25:205-215, EMM69:234-245, Hem1:3, Hem1:42, Hem1:43, Hem1:93, Hem3:2, Hem3:40, Hem4:102, Hem4:131, Hem4:2, Hem4:27, Hem4:69, Hem5:102,

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- as Spathocera dalmanni HN13:9, HSGN8:8
- as Spathocera Dalmanni Saunders 1892, Suffolk Hets
- as Spathocera dalmannii Ent86:34-40

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- as S. rhombeus EMM81:253-273, EMM82:94-95
- as Syro. rhombeus EMM91:7-27
- as Syromastes rhombeus BJENH18:208, BJENH24:170, CornwallHets, EMM87:103, EMM87:236, EMM88:255, HN5:7, HN6:9, HN9:4, LondonHets
- as *Syromastus rhombeus* BJENH18:209, BJENH20:191, BJENH20:193-194, BJENH22:184, BJENH31:38-39, BJENH8:207, EMM81:278-279, EMM85:23, EMM88:22, EMM89:223, EMM94:24, Ent86:34-40, Ent87:15-18, Ent87:25-30, Ent88:10-17, Ent88:33-36, Ent88:89-91, Ent92:6-13, GloucsHets, Hem1:3, Hem1:42, Hem1:43, Hem1:93, Hem2:13, Hem2:31, Hem2:46, Hem3:2, Hem3:40, Hem3:75, Hem3:93, Hem4:102, Hem4:131, Hem4:147, Hem4:27, Hem4:40, Hem4:69, Hem5:102, Hem5:120, Hem5:147, Hem5:149, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:54, Hem5:93, Hem6:231, Hem6:246, Hem6:247, Hem6:248, Hem6:25, HN11:15, HN13:10, HN8:9, HN9:13, HN9:3, PTSLENHS1951-52:43-44, PTSLENHS1962:123-183, S&L1959, TSBE11:245-280
- as *Verlusia quadrata* Butler1923, EMM61:253-257, Ent59:84-85, ERJV42:49-51, HantsHets, TSBE2:47-67
- as *Verlusia rhombea* D&S1865, EMM26:296, EMM29:261-262, EMM36:94-101, EMM39:17-18, EMM44:22-29, EMM51:220, EMM60:117-118, EMM69:234-245, EMM71:113-114, EMM77:101-104, EMM9:192-193, Ent27:222, Ent59:84-85, PSLENHS1907-08:62, Saunders1892, SuffolkHets, Synopsis1875
- as Verlusia rhombea var. quadrata TSBE1:51-84
- as Verlusia rhomboidea Ent40:190, ERJV19:196

#### **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vicecounty Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above. Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

## Arenocoris fallenii (Schilling) (Coreidae)

Common name. The Geranium Squashbug.

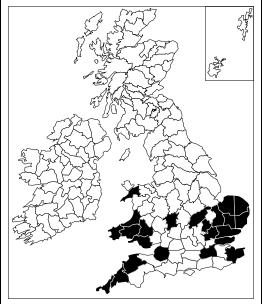
First report. D&S1865 as Pseudophloeus Falléni.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sandhills (n), brecks, sandy field, sand quarry and disused gravel workings; under/at the roots of *Erodium* (n), *Euphorbia paralias* and *Ononis*.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May		1	2			2
June	1	3	1	2	2	
July	1		1		1	
August	1			2		1
September		1	1		1	
October						
November						
December						

## Arenocoris waltlii (Herrich-Schaeffer) (Coreidae)

Common name. The Breckland Squashbug.

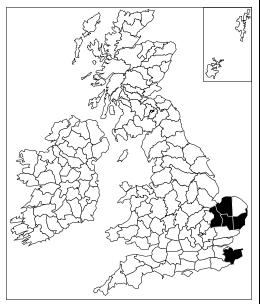
First report. EMM38:80 as Pseudophloeus Waltlii.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from under Erodium cicutarium on sand, at the roots of grass in a very dry place and in a sand pit.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May		1		1		
June		1				
July	1				1	
August	2					
September			1			
October						
November						
December						

## Bathysolen nubilus (Fallén) (Coreidae)

Common name. The Black Medick Squashbug.

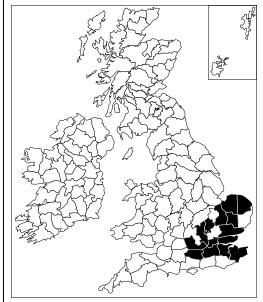
First report. D&S1865 as Pseudophloeus nubilus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from chalk pit (n), cinder/gravel-covered waste land, sandhills, sand pit (n), old railway sidings, a shingle bar, grassland and gravel-pit; at the roots of grass, black medick (n) and *Erodium*. It has been taken sweeping (n) and in a pitfall trap.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June	1	1		1	N	
July	1 N	1			2 N	2 N
August						2
September	1 N	1	1			
October		2				
November						
December						

## Ceraleptus lividus Stein (Coreidae)

Common name. The Dune Squashbug.

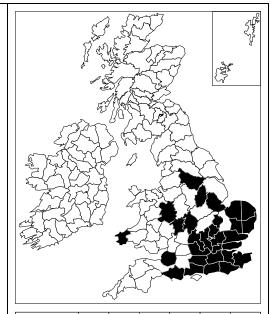
First report. D&S1865 as Ceraleptus squalidus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from brownfield sites, base of a cliff, quarry, sand dunes, sand pit (n), gravel pit (n), railway bank (w), chalk grassland, meadow, wood, cinder-covered waste land (n) and under reptile refugia; under/at the roots of plants (w, n), sweeping, on flowers, in moss and on reeds. Specific plant associations include hemlock water-dropwort, Potentilla reptans (n), hare's foot trefoil (n), Calluna vulgaris, grass (w), Trifolium campestre (n), black medick (n) and Trifolium dubium (n).



	1-5	6-10	11-15	16-20	21-25	26-
January						
February					1	
March						
April					1	
May		1			3	1
June	4				1	1
July	3					N
August			1	1	4 N	
September	3	3	2 N			
October	1	1		1		
November	1	1				
December						



# Coreus marginatus (Linnaeus) (Coreidae)

Common name. The Dock Squashbug.

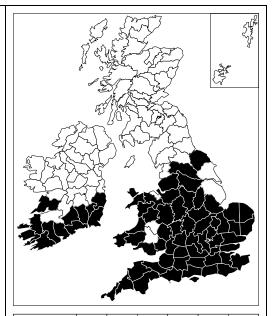
First report. D&S1865 as Syromastes marginatus.

Ambiguities. None reported.

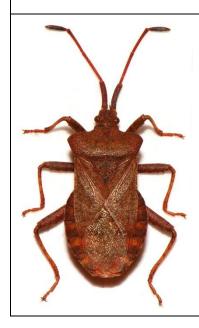
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sand pit, sea cliff, gravel pit, garden, clay pit, derelict land, orchard, arable fields, meadows, heaths, roadside verge, dismantled railway line, woodland ride; sweeping (n), beating (n) and on plants (n). Specific plant associations include Rumex (n), black medick, rhubarb, Polygonum, bramble (n), Cynoglossum, dewberry, ling, Spiraea (n), Convolvulus sepium and sea beet. Feeding has been observed on rhubarb, the calyces of Polygonum aequale (n) and blackberry blossom.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April				1	1	
May		3	3 N	1	5	6
June	5	4	2		2	
July	4	3 N	4 N	4 N	2 N	1 N
August	2	1 N	1 N	N	3 N	6 N
September	3 N	5		2	3	3
October	2					
November						
December						



# Coriomeris denticulatus (Scopoli) (Coreidae)

Common name. The Spiny Squashbug.

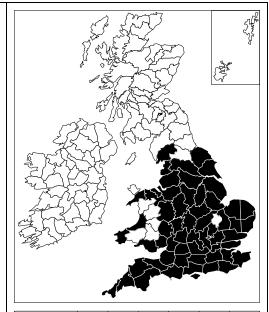
First report. D&S1865 as Coreus hirticornis.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from railway cuttings, cliffs, gravel pit (n), clay pit, chalk pit (n), sand pit (n), meadow, railway cutting, chalk grassland, roadside, maritime cliffs, downs and cindercovered waste land (n); sweeping, on (n) and at the roots (n) of plants. Specific plant associations include Trifolium campestre, hare's foot trefoil (n), black medick (n), Spergularia rubra (n), Stellaria media, grass, moss, Hieraceum and flowers of carrot and thistle. It has been observed feeding on a dead squirrel, and laying eggs on Hieraceum leaves. In culture, nymphs supplied with several plants associated mostly with black medick, and feeding on the plant was seen.



	1-5	6-10	11-15	16-20	21-25	26-
January	1					
February						
March	1					
April		1		2		
May	1	2	1	1	2	3
June	10	3	7	2	3	2
July	3	2 N	3	N	2 N	2 N
August		2 N	3	1	4 N	
September	3	1	3	N	1	
October	2					
November		1				
December						



## Enoplops scapha (Fabricius) (Coreidae)

Common name. The Cliff Squashbug.

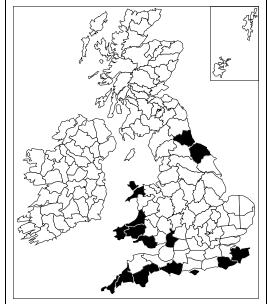
First report. D&S1865 as Enoplops scapha.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from cliffs (n), coastal heath, quarry wall, hill slopes, railway cuttings, sandhills (n), garden and dry bank; on (n), under (n) and at the roots (n) of plants. Specific plant associations include mayweed (n), ox-eye daisy (n), sea beat, Ononis, coltsfoot and ragwort (n). Nymphs found at the roots of ragwort were reared to adult on this plant. In culture, nymphs found on/under mayweed fed on the fruiting capitula of the plant.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April				1		
May						1
June					1	1 N
July		2	1 N			1
August				1	1 N	2 N
September		1			2	2
October		1	2			
November						
December						

No habitus images are available.

## Gonocerus acuteangulatus (Goeze) (Coreidae)

Common name. The Box Squashbug.

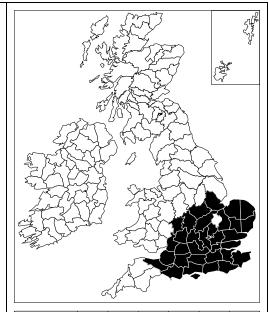
First report. D&S1865 as Gonocerus venator.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from hillside, parkland (n), garden (w, e, n), brownfield site, woodland, roadside, churchyard (n), orchard, chalk quarry (e, n) and hedgerow (n); by sweeping (n), beating (w, n) and on plants (e, n). Specific plant associations include box (n), hawthorn (n), aspen, beech, conifers (w), holly (w), ivy, juniper (w), Lawson's cypress (n), Leyland Cypress (w), oak, rose (e, n), sycamore (n), yew (n), alder buckthorn, buckthorn (e, n), Mahonia, plum and cherry-laurel. Eggs have been observed on buckthorn leaves.



	1-5	6-10	11-15	16-20	21-25	26-
January	1		1		1	1
February						
March		1				
April	1	2	1	1		1
May	1	1	1		3	4
June	E	1	1		N	
July		1				2 NE
August	1 N	NE	2 N	1 N	2 N	11 N
September	3 N	2	5	4	4	
October	1 N	2	2	2		
November			1			1
December		1				



# Leptoglossus occidentalis Heidemann (Coreidae)

Common name. The Conifer Squashbug.

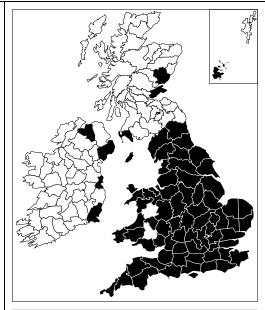
First report. HN12:7-9 as Leptoglossus occidentalis.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported primarily at light and in buildings (w), with two records from conifers: beating Norway spruce and on larch. A nymph has been found on a kitchen door.



	1-5	6-10	11-15	16-20	21-25	26-
January	1					
February						
March						
April					1	
May				1		
June			1			
July						
August						6
September	4	5	1	5	4	1
October	4	5	18	9	4	5 N
November	2	1	1			
December						



# Spathocera dalmanii (Schilling) (Coreidae)

Common name. The Sorrel Squashbug.

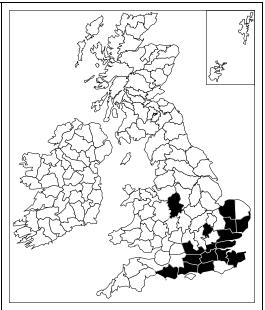
First report. D&S1865 as Spathocera Dalmani.

Ambiguities. None reported.

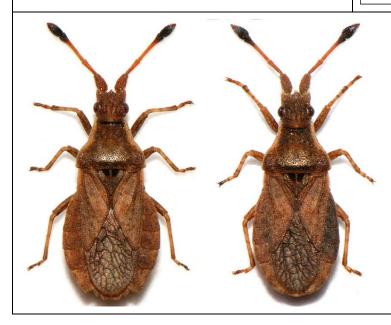
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sandy ground, gravel pit, charred ground (n), derelict land, sand pit (n), grassland (n), dunes, disturbed heathland, sea wall (n) and wood; primarily by sweeping, on, under or at the roots of sorrel (n). It has also been taken sweeping grass, under/in moss and by suction-sampling.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April				1		
May				1		2
June	2	1	1	2	2	1
July	2					1
August		1	2		2 N	1 N
September	1		1		1	1
October	N	1				
November						
December						



## Syromastus rhombeus (Linnaeus) (Coreidae)

Common name. The Jodhpur Squashbug.

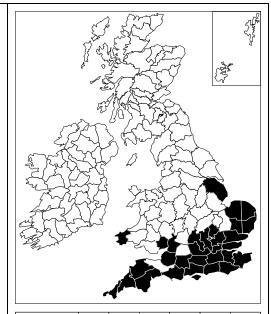
First report. D&S1865 as Verlusia rhombea.

Ambiguities. None reported.

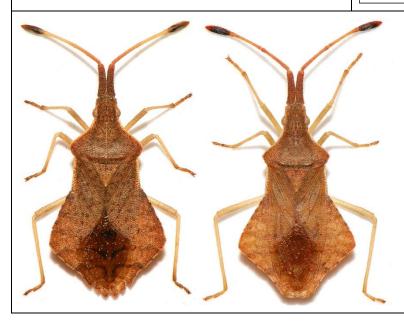
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sandhills, brownfield site, clay pit, derelict field, chalk pit, sand pit (n), mangold fields, waste tip (n), disturbed ground, grassland, cemetery, woodland (n) and cinder-covered waste land (n); primarily by sweeping (n) and on/under plants (n). Specific plant associations include Stellaria (n), Cerastium (n), common toadflax, fat hen, hare's foot trefoil, nettle (n), Nottingham catchfly (n), Spergularia rubra (n), stonecrop, grass, Calluna, heath and plantain. It has also been taken in a pitfall trap, by suction sampling and in flight. In culture, nymphs have been seen to feed on mignonette, and unripe fruits of Cochlearia danica and Cerastium fontanum.



	1-5	6-10	11-15	16-20	21-25	26-
January						1
February						
March						
April			1		2	1
May		1	2	1	1	1
June	1		1	3	2	1
July	1 N			1 N	2	1
August	1 N	3 N	2 N		1	5 N
September	2	2	1	1		1
October	1					
November						1
December	1					1



# A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (9) THE FAMILY ALYDIDAE

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#### Introduction

This is the ninth part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Alydidae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

#### **Heximonth records**

Alydus calcaratus (Linnaeus) (Alydidae)

05D: 16 May 1886 [Chobham, Surrey. LondonHets]

06B: 10 June 1893 [Chobham Common, Surrey. LondonHets] 8 June 1956 [Porthcothan, Cornwall. Nymphs. CornwallHets] 10 June 1912 [Weybridge, Nymphs, AntGuests]

06C: 12 June 1914 [Woking. Nymph. AntGuests]

06D: 17 June 1906 [New Forest. Nymph. AntGuests]

06E: 23 June 1973 [Browndown, Hampshire. Nymph. PTBENHS6:118-120]

06F: 28 June 2006 [Dunmere Wood, Cornwall. Nymphs. CornwallHets]

07A: 1 July 1945 [Near Heath and Reach, Bedfordshire. Nymphs. EMM86:6-8] 2 July 1960 [Oxshott Heath, Surrey. LondonHets]

07B: 9 July 2003 [Bodmin, Cornwall. CornwallHets] 8 July 2014 [Braeburn Park. BJENH29:69-88] 6 July 1896 [Chobham Common, Surrey. LondonHets] 10 July 1912 [Weybridge. Nymphs. ERJV25:89-97]

07C: 13 July 2005 [Alders Hill NR, Poole, VC9. HN6:14] 14 July 2006 [Cot Valley, Cornwall. CornwallHets] 13 July 2005 [Stratford Railway Line, South Essex. BJENH20:193-194]

07E: 24 July 1906 [Chale, Isle of Wight. Nymphs. AntGuests] 21 July 1983 [Santon Warren, VC28. Hem4:18]

07F: 27 July 2006 [Treleaver Cliff, Cornwall. Nymph. CornwallHets]

- 08A: 3 August 1960 [Ampthill, Bedfordshire. EMM97:32-33] 5 August 1946 [Clophill, Bedfordshire. Adults and nymphs. EMM86:6-8] 4 August 2015 [Stewartby Pit. BJENH29:69-88]
- 08B: 6 August 1952 [Hounslow Heath, Middlesex. Adults. Ent86:34-40]
- 08C: 14 August 1983 [Mildenhall, Suffolk. PTBENHS17:18-19] 12 August 1999 [Penlee Point, Cornwall. Nymphs. CornwallHets] 11 August 1920 [Weybridge. Nymphs. ERJV33:21-25]
- 08D: 20 August 1993 [Hartlebury Common LNR, Worcestershire. EMM133:17-26] 20 August 2002 [Porthcurnick, Cornwall. CornwallHets] 19 August 1995 [Silchester Common, Berkshire. BJENH9:173-174]
- 08E: 21 August 1953 [Bixley Heath, near Ipswich, Suffolk. EMM90:81-82] 22 August 2006 [Lansallos Cliff, Cornwall. CornwallHets] 25 August 2007 [Sheets Heath Common, near Brookwood, Surrey. BJENH21:184] 22 August 1894 [The Common, Virginia Water, Surrey. LondonHets]
- 08F: 30 August 1997 [Levant Zawn, Cornwall. CornwallHets] 30 August 1895 [Oxshott Heath, Surrey. LondonHets] 27 August 1961 [Swanscombe, Kent. LondonHets]
- 09A: 2 September 2004 [Hawkers Cove, Cornwall. CornwallHets] 5 September 1923 [St George's Down, Isle of Wight. EMM60:117-118]
- 09B: 10 September 1960 [Ampthill, Bedfordshire. EMM97:32-33] 10 September 1950 [Ash Vale, Surrey. LondonHets] 8 September 1950 [Ash Vale, Surrey. LondonHets] 9 September 2011 [Braeburn Park. BJENH29:69-88] 6 September 1971 [Longcross Halt, Chobham Common, Surrey. EMM108:59] 9 September 1919 [Pentire Head and Polzeath, Cornwall. TSBE1:51-84]
- 09C: 11 September 1944 [Near Maulden, Bedfordshire. EMM86:6-8]
- 09D: 16 September 1967 [Black Heath, Surrey. PTSLENHS1967:108] 20 September 2009 [Cooper's Hill, VC30. HN15:12] 20 September 2006 [Erith Gravel Pit, West Kent. BJENH20:193-194] 20 September 2009 [Near Cooper's Hill, VC30. HN15:12] 19 September 1986 [Troopers Hill, Bristol, Gloucestershire. GloucsHets]
- 09F: 30 September 1897 [Bournemouth. EMM69:234-245]
- 10A: 5 October 2014 [Dartford bypass, near Crayford, West Kent. BJENH28:95]
- 10B: 8 October 1953 [Sudbury, Suffolk. Adult. EMM90:40]
- 11A: 4 November 1962 [Farningham Wood, Kent. LondonHets]

#### **Detailed records**

Alydus calcaratus (Linnaeus) (Alydidae)

On a small patch of sand dunes and on the rocky scree of a cliff [Porthcothan, Cornwall. 8 June 1956. Nymphs. CornwallHets]

With various ants [Weybridge. 10 June 1912. Nymphs. AntGuests]

With Formica sanguinea, running on a bank [Woking. 12 June 1914. Nymph. AntGuests]

With Formica fusca, running on a hot sandy bank [New Forest. 17 June 1906. Nymph. AntGuests]

On heaths [Near Heath and Reach, Bedfordshire. 1 July 1945. Nymphs. EMM86:6-8]

From brownfield site [Braeburn Park. 8 July 2014. BJENH29:69-88]

Running about with the ants *F. sanguinea*, *F. rufa*, *F. fusca*, *L. flavus*, *etc* [Weybridge. 10 July 1912. Nymphs. ERJV25:89-97]

Brownfield site [Stratford Railway Line, South Essex. 13 July 2005. BJENH20:193-194]

With *Formica fusca* and *A. (D.) niger*, running on a path [Chale, Isle of Wight. 24 July 1906. Nymphs. AntGuests]

On the ground of the steep, frequently burnt slope of a railway cutting [Ampthill, Bedfordshire. 3 August 1960. EMM97:32-33]

On low herbage on sandy roadside [Clophill, Bedfordshire. 5 August 1946. Adults and nymphs. EMM86:6-8]

Sweeping a brownfield site [Stewartby Pit. 4 August 2015. BJENH29:69-88]

Running on the bare ground among *Calluna* [Hounslow Heath, Middlesex. 6 August 1952. Adults. Ent86:34-40]

Netted [Mildenhall, Suffolk. 14 August 1983. PTBENHS17:18-19]

Running in company with Formica rufa [Weybridge. 11 August 1920. Nymphs. ERJV33:21-25]

On recent land-slipped undercliff [Porthcurnick, Cornwall. 20 August 2002. CornwallHets]

Among heather [Bixley Heath, near Ipswich, Suffolk. 21 August 1953. EMM90:81-82]

Sweeping heather [Sheets Heath Common, near Brookwood, Surrey. 25 August 2007. BJENH21:184]

Sweeping [The Common, Virginia Water, Surrey. 22 August 1894. LondonHets]

On the ground of the steep, frequently burnt slope of a railway cutting [Ampthill, Bedfordshire. 10 September 1960. EMM97:32-33]

Sweeping scrubby grass on sand [Ash Vale, Surrey. 10 September 1950. LondonHets]

From brownfield site [Braeburn Park. 9 September 2011. BJENH29:69-88]

On seed-heads of clover on a railway embankment. Flying between the heads in warm sunshine [Longcross Halt, Chobham Common, Surrey. 6 September 1971. EMM108:59]

On low herbage in sandy ditch [Near Maulden, Bedfordshire. 11 September 1944. EMM86:6-8]

On open heathy ground created by tree clearance [Cooper's Hill, VC30. 20 September 2009. HN15:12]

Brownfield site [Erith Gravel Pit, West Kent. 20 September 2006. BJENH20:193-194]

On a roadside sand bank where Gorse had been thinned to create heathland habitat [Near Cooper's Hill, VC30. 20 September 2009. HN15:12]

Beating lucerne on a bank by a road [Dartford bypass, near Crayford, West Kent. 5 October 2014. BJENH28:95]

On a gravelly mound in a disused gravel-pit [Sudbury, Suffolk. 8 October 1953. Adult. EMM90:40]

Dry, sandy heaths [Bagshot Sands area, Surrey. S&L1959]

Sandy, sparsely vegetated areas [Bedfordshire. BJENH18:208]

From an abandoned metalliferous mine site [Binner Downs, near Leedstown, West Cornwall. 1994-2007. BJENH21:205-214]

Running and flying in sandy places and very active in the hot sunshine [Chobham.

August/September. EMM19:140]

Running and flying about on sandy heaths and commons, and in company with ants [England and Wales. Stage uncertain. AntGuests]

On *Ononis* [Folkestone. September. D&S1865]

Associated with open sandy ground amongst areas of heather and sparse grass [Hartlebury Common LNR, Worcestershire. EMM133:17-26]

Running with Formica fusca v. glebaria [Horton, Glamorgan. July 1915. Nymph. AntGuests]

In company with Formica rufa [Land's End. Stage uncertain. AntGuests]

Captured and dragged along by *Pompilus* [Minehead. 1908. Stage uncertain. AntGuests]

Amongst heath [Plumstead Common, Kent. August/September. LondonHets]

On sand dunes accompanied by ants [Porthcothan, Cornwall. June 1956. Nymphs. EMM92:372-374]

On scree on a steep cliff slope accompanied by ants [Porthcothan, Cornwall. June 1956. Nymphs. EMM92:372-374]

On a weedy bank [Purfleet. Saunders1892]

Sandy heaths [Surrey. Butler1923]

With A. (D.) niger [Weybridge. 15 July 1919. Stage uncertain. AntGuests]

With the ants *F. sanguinea*, *F. rufa*, *F. fusca*, *A.* (*C.*) *flavus*, *etc* [Weybridge. 18 July 1912. Stage uncertain. AntGuests]

On *Ulex minor* [Weybridge, Surrey. September. LondonHets]

From a derelict, metalliferous mine site [Wheal Johnny, Kehelland, near Camborne, West Cornwall. 1994/95. BJENH9:111-115]

Running with workers of *F. rufa*, *F. fusca* and other ants [Windsor Forest. Nymph. EMM72:210-219]

Among *Erica* and *Calluna* [Witley Common, Surrey. 1957/1958. Adult and nymphs. Ent92:6-13] With *Formica sanguinea* [Woking. 29 May 1906. Stage uncertain. AntGuests]

## **Bibliography**

Alydus calcaratus (Linnaeus) (Alydidae)

as A. calcaratus EMM81:253-273 as Allydus calcaratus ERJV25:89-97 as Aly. calcaratus EMM91:7-27 as Alydus calcaratum HN6:14 as Alydus calcaratus AntGuests, BJENH18:208, BJENH20:193-194, BJENH21:184, BJENH21:205-214, BJENH28:95, BJENH29:69-88, BJENH8:207, BJENH9:111-115, BJENH9:173-174, Butler1923, CornwallHets, D&S1865, EMM108:59, EMM133:17-26, EMM19:140, EMM2:270-272, EMM39:269-271, EMM60:117-118, EMM69:234-245, EMM72:210-219, EMM81:12, EMM86:6-8, EMM89:17, EMM89:303, EMM90:40, EMM90:81-82, EMM92:372-374, EMM97:32-33, Ent59:84-85, Ent86:34-40, Ent89:223-231, Ent92:6-13, ERJV14:37-40, ERJV18:318, ERJV33:21-25, GloucsHets, HantsHets, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem2:13, Hem2:31, Hem3:2, Hem3:22, Hem3:23, Hem3:40, Hem4:102, Hem4:131, Hem4:147, Hem4:17, Hem4:18, Hem4:2, Hem4:27, Hem4:69, Hem4:86, Hem5:102, Hem5:120, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:54, Hem5:93, Hem6:235, Hem6:25, HN10:5, HN15:12, HN17/18:26, HN19/20:7, HN6:1, HN9:15, HSGN11:8, HSGN11:9, HSGN5:2, HSGN7:3, LondonHets, PTBENHS17:18-19, PTBENHS19:55, PTBENHS6:118-120, PTSLENHS1950-51:79-80, PTSLENHS1962:123-183, PTSLENHS1967:108, S&L1959, Saunders1892, Synopsis1875, TSBE1:51-84, TSBE11:245-280, TSBE16:1-48

## **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vicecounty Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above. Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

## Alydus calcaratus (Linnaeus) (Alydidae)

Common name. The Waspbug.

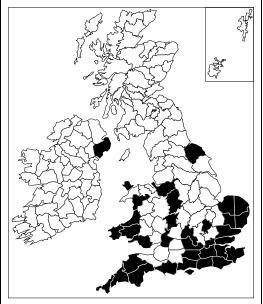
First report. D&S1865 as Alydus calcaratus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from heaths (n), open sandy ground (n), banks (n), brownfield site, gravel pit, sand dunes (n), cliff scree (n), undercliff and railway embankment/cutting; by sweeping, on the ground, on plants, and in flight. Specific plant associations include heather, heath, lucerne, Ononis, clover and Ulex minor. It has been found in the company of ants (n), and has been observed being captured and dragged along by Pompilus.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May				1		
June		1 N	N	N	N	N
July	1 N	3 N	3		1 N	N
August	3 N	1	1 N	3	4	3
September	2	6	1	5		1
October	1	1				
November	1					
December						

No habitus images are available.

# A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (10) THE FAMILY RHOPALIDAE

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#### Introduction

This is the tenth part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Rhopalidae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

#### **Heximonth records**

Brachycarenus tigrinus (Schilling) (Rhopalidae)

06D: 19 June 2019 [Barnham, West Suffolk. Hem6:247] 18 June 2019 [Icklingham Plains, West Suffolk. Hem6:247] 20 June 2019 [Icklingham Plains, West Suffolk. Hem6:248]

06E: 21 June 2019 [Near Thetford, West Norfolk. Hem6:248] 21 June 2019 [Near Two Mile Bottom, West Norfolk. Hem6:248] 21 June 2006 [Swanscombe Marshes, West Kent. BJENH20:55]

07C: 11 July 2005 [Purfleet, South Essex. HN6:10]

07F: 28 July 2003 [Battersea Park, Surrey. BJENH17:137-141]

08D: 16 August 2005 [Bawdsey Ferry beach, Suffolk. BJENH20:191]

08E: 22 August 2006 [Headington Hill Park, Oxford, VC23. ERJV125:135-136]

08F: 30 August 2005 [Dagenham, Essex. HN6:10]

09A: 4 September 2014 [Greenway, Stratford. BJENH29:69-88] 3 September 2014 [Hackney Marsh. BJENH29:69-88]

09C: 13 September 2006 [Belvedere, West Kent. BJENH20:55] 13 September 2006 [Thames Barrier Park East, South Essex. BJENH20:55] 13 September 2006 [Woolwich, West Kent. BJENH20:55]

Chorosoma schillingii (Schilling) (Rhopalidae)

01A: 1 January 1995 [Tattershall Old Gravel Pits Area, VC54. Hem3:84]

07A: 5 July 2003 [Porth Joke, Cornwall. Nymph. CornwallHets]

- 07B: 10 July 1923 [Camber sandhills. Nymphs. EMM59:203-204] 8 July 1999 [East Ham, VC18. ERJV115:229]
- 07C: 11 July 1984 [Freshwater, Merseyside. ERJV97:147] 14 July 1982 [Freshwater, Merseyside. ERJV97:147] 11 July 2003 [West Pentire, West Cornwall. BJENH18:165-170]
- 07D: 19 July 1983 [Lakenheath Warren, VC26. Hem4:18] 20 July 1983 [Santon Warren, VC28. Hem4:18] 17 July 1878 [Studland. EMM69:234-245] 20 July 1983 [Two Mile Bottom, VC28. Hem4:18]
- 07E: 21 July 1983 [Santon Warren, VC28. Hem4:18] 23 July 2011 [Thursley Common, Surrey. Adults. BJENH25:176-177]
- 08A: 4 August 1984 [Eskmeals Dunes NR, Cumberland. ERJV97:8] 5 August 1926 [Porthcawl, Glamorgan. EMM64:64] 3 August 1975 [Sandscale Hawes Warren, Cumbria. ERJV97:147]
- 08B: 8 August 1964 [Dungeness, Kent. PTSLENHS1964:36] 7 August 1986 [Near Coventry, Warwickshire. Female. EMM124:80] 8 August 2000 [River Thames, Lotts Road Power Station, VC21. ERJV115:229] 9 August 1981 [Santon Warren, VC28. Hem4:18]
- 08C: 11 August 1984 [Bishopstone, Kent. PTBENHS18:20] 14 August 1982 [Rauceby Warren, Lincolnshire. EMM120:177] 14 August 2010 [Stainton Quarry, VC63. HN16:13]
- 08D: 16 August 1987 [Near Farcet, Huntingdonshire. EMM127:250]
- 08E: 21 August 1985 [Abbots Ripton, VC31. EMM127:250] 25 August 2001 [Catcliffe, VC63. HN7:15]
- 08F: 31 August 2017 [Kilnsea, VC61. Hem6:214] 28 August 1982 [Sinah Common, Hayling Island, VC11. Hem3:104]
- 09A: 5 September1965 [Dungeness, Kent. PTSLENHS1965:91] 4 September 1977 [Sandscale Hawes Warren, Cumbria. ERJV97:147]
- 09B: 8 September 2009 [Blakeney Point, VC28. HN15:13] 7 September 2009 [Holkham Dunes, VC28. HN15:13] 8 September 1973 [Wangford Fen, Suffolk. PTBENHS6:103]
- 09C: 14 September 2006 [Borax Factory Works, Erith, West Kent. BJENH20:193-194]
- 09D: 19 September 2006 [Brent Railway Sidings, Cricklewood, Middlesex. BJENH20:193-194]
- 09E: 22 September 1923 [Deal. ERJV97:8]

# Corizus hyoscyami (Linnaeus) (Rhopalidae)

- 03D: 16 March 2009 [Windsor Hill Reserve, near Princes Risborough, VC24. Adult. HN13:9]
- 04B: 10 April 2010 [Peterborough, VC32. Adult. HN15:11] 8 April 2011 [Woodmancote, Gloucestershire. Male. HN17/18:21]
- 04D: 19 April 2007 [Burford, VC23. HN9:13] 20 April 1924 [Near Killoughter and Newcastle, Co Wicklow. IrelandHets]
- 04E: 22 April 2007 [Fisteridge Wood, Wiltshire. EMM144:163-176] 24 April 2009 [Gotherington, near Cheltenham, VC33. HN14:8] 21 April 2019 [Woodwalton Fen NNR, VC31. Hem6:270] 21 April 2007 [Wyre Forest, Worcestershire. EMM144:163-176]
- 04F: 30 April 1999 [Gore Hill, Dorset. EMM144:163-176]
- 05A: 2 May 2012 [Burnt Platt wood, Stoke Row, Oxfordshire Chilterns. Adult. EMM150:63-64] 3 May 1999 [Morfa Harlech. Adults. EMM144:163-176]
- 05B: 7 May 2014 [Braeburn Park. BJENH29:69-88] 9 May 2002 [Friston, Suffolk. EMM144:163-176] 9 May 2002 [Friston, VC25. Adult. HN8:10]
- 05C: 11 May 2006 [South Hampshire. EMM144:163-176]
- 05D: 18 May 2005 [Avonmouth Docks, VC34. Adult. HN8:10] 19 May 2003 [Penhale Sands, Cornwall. CornwallHets] 18 May 2004 [Porthleven to Loe Bar, Cornwall. CornwallHets]
- 05E: 23 May 1959 [Llanbedrog to Abersoch, Caernarvonshire. ERJV71:220-221] 25 May 1955 [Plas Crug, Aberystwyth, Cardiganshire. Female. EMM92:54-64]
- 05F: 31 May 2006 [Lowland Point, Cornwall. CornwallHets] 29 May 1922 [Near Killoughter and Newcastle, Co Wicklow. IrelandHets] 28 May 2006 [Ventnor storage depot, VC10. Female. HN8:10]
- 06A: 4 June 2005 [Nanterrow, Gwithian, Cornwall. CornwallHets]
- 06B: 7 June 2006 [Carreg, Porth cliff, VC49. Adults. HN8:10] 8 June 1956 [Constantine Bay, Cornwall. CornwallHets] 9 June 1956 [Daymer Bay, Cornwall. CornwallHets] 10 June 1956 [Penhale Sands, Cornwall. CornwallHets] 7 June 1956 [Rock, Cornwall. CornwallHets]

- 06C: 12 June 2015 [Bletchley, Blue Lagoon. BJENH29:69-88] 15 June 1989 [Braunton Burrows, North Devon. BJENH4:119-121] 13 June 2005 [Godrevy, Cornwall. CornwallHets] 14 June 2005 [Peveril Point, VC9. Adult. HN8:10] 12 June 1995 [Sennen Cove, Cornwall. CornwallHets]
- 06D: 18 June [Bude, Cornwall. Female. Ent88:33-36] 19 June 1898 [Near Black Hole, Boscastle, Cornwall. TSBE1:51-84] 19 June 2012 [Pitsdown Hill, Buckinghamshire Chilterns. Adults. Hem1:28] 20 June 2007 [VC16. HN11:12]
- 06E: 21 June 1925 [Brittas Bay, Co Wicklow. IrelandHets] 22 June 2005 [Porth Joke, Cornwall. CornwallHets] 23 June 1994 [Porthlysgi Cliffs, Wales. BJENH9:3-5] 23 June 1998 [Samphire Hoe cliff slope, VC15. Adult. HN8:10] 23 June 1998 [Samphire Hoe, VC15. Adult. HN8:10] 21 June 1990 [Stoke Point, Noss Mayo, Devon. BJENH4:43]
- 06F: 28 June 2006 [Cahore Point, VCH12. Adult. HN8:10]
- 07A: 3 July 2006 [Tremorva Hayle, Cornwall. CornwallHets]
- 07B: 10 July 1927 [Cahore, Co Wexford. IrelandHets] 8 July 1990 [Poppit Sands, VC45. Adult. HN8:10]
- 07C: 14 July 2011 [Pitstone Hill, Chiltern Hills, VC24. Female. ERJV124:143-145]
- 07D: 20 July 1926 [Arklow, Co Wicklow. Adult and nymph. IrelandHets] 20 July 2006 [Beachley Point, VC34. HN8:13] 16 July 2006 [Pamber Forest woodland, VC12. Adult. HN8:10] 18 July 2011 [The Chase, Woolton Hill VC12. Male. ERJV124:143-145] 17 July 2013 [Worsbrough Common, Barnsley, VC63. Adult. HN21:5]
- 07E: 23 July 2014 [Greenway, Stratford. BJENH29:69-88] 21 July 1927 [Kilgorman, Co Wexford. IrelandHets] 21 July 2014 [River Lee. Adults and nymphs. BJENH29:69-88] 24 July 2011 [South of Burton Pidsea village, VC61. Male. HN17/18:22] 22 July 2015 [TL46, VC29. Hem3:93] 25 July 2006 [Woorgreens Reserve, Forest of Dean, VC34. HN8:13] 21 July 2013 [Worminghall, Buckinghamshire. Adults and nymphs reared in culture. EMM150:63-64]
- 07F: 27 July 2013 [Berinsfield, Oxfordshire. Adults and nymphs reared in culture. EMM150:63-64] 31 July 2011 [Botany Bay Wood, near Chiddingfold, Surrey. Male. ERJV124:143-145] 30 July 2010 [Bourne South Fen, VC53. Hem3:84] 29 July 2013 [Bradwell Grove, Oxfordshire. Nymphs reared in culture. EMM150:63-64] 28 July 2011 [Hitchcopse Pit, near Dry Sandford, VC22. Males and females. ERJV124:143-145] 31 July 2015 [Marston Vale. BJENH29:69-88] 27 July 2006 [Morville, VC40. Adult. HN8:10] 28 July 2006 [Rushbeds Forest, VC24. Male. ERJV124:143-145] 30 July 2006 [Trott's Copse, VC11. Hem3:104]
- 08A: 1 August 2006 [Bernwood Forest, VC24. Adult. ERJV124:143-145] 2 August 2011 [Burnt Platt Wood, near Stoke Row, VC23. Males and females. ERJV124:143-145] 5 August 2010 [Dunwich Forest, VC25. Adults. HN16:10] 4 August 2015 [Kempston Hardwick. BJENH29:69-88] 1 August 1927 [Magherabeg, Co Wicklow. IrelandHets] 5 August 2011 [Near Stanton St John, VC23. Female. ERJV124:143-145] 3 August 2015 [Olympia, London. BJENH29:69-88] 5 August 2006 [Perivale Wood, VC21. Adult. HN8:10] 2 August 2007 [Spartum Fen, near Latchford, VC23. Female. ERJV124:143-145] 1 August 2005 [Tucking Mill, Bath, VC6. HN6:14] 1 August [Ventnor. D&S1865]
- 08B: 8 August 2005 [Bernwood Forest, VC24. Female. ERJV124:143-145] 7 August 2006 [Duck End NR, Maulden, Bedfordshire. EMM144:163-176] 6 August 2018 [Kilnsea, VC61. Hem6:214] 9 August 1918 [Lezant, Cornwall. CornwallHets] 7 August 2013 [Moorends, Doncaster, VC63. Adult. HN21:5] 8 August 2018 [Near Birch Hall, Langdale Forest, North York Moors. Hem6:215] 10 August 2018 [Near Sands Farm, Sunk Island, Plain of Holderness, VC61. Hem6:216] 9 August 2006 [Roundbush, Mundon, VC18. Adult. HN8:10] 10 August 2006 [South Essex. Adult. EMM144:163-176] 8 August 2018 [St Nicholas Fields LNR, York, VC62. Hem6:237] 8 August 2006 [Wrentham, Beccles, VC25. Adults. HN8:10]
- 08C: 11 August 2005 [Chapman's Pool, VC9. Adult. HN8:10] 15 August 2014 [Clifton Heath, Oxfordshire. Hem2:58] 11 August 2005 [Egmont Bight, VC9. Adults. HN8:10] 11 August 2005 [Hemmick, Cornwall. CornwallHets] 13 August 2011 [Hitchcopse Pit, near Dry Sandford, VC22. Male and females. ERJV124:143-145] 13 August 1870 [South Wales. EMM7:157] 13 August 2009 [The Holies, Streatley, VC22. Female. ERJV124:143-145] 14 August 2006 [The Holies, Streatley, VC22. Male. ERJV124:143-145] 15 August 2008 [Whitecross Green Wood, VC24. Female. ERJV124:143-145]

- 08D: 20 August 2009 [Ash Ranges, VC17. HN14:8] 19 August 2006 [Braunton, VC4. Adults. HN8:10] 17 August 2010 [Caistor, VC54. Hem3:84] 18 August 1869 [Dawlish. EMM69:234-245] 16 August 2005 [Dorset. Adult. EMM144:163-176] 19 August 2005 [Galit y Mor, Lleyn, VC49. Adult. HN8:10] 17 August 2005 [Holt Heath, VC9. Adult. HN8:10] 16 August 2006 [Marcham Park, VC22. Adult. HN8:10] 17 August 1985 [Newborough Warren, VC52. Adults and nymphs. HN8:10] 18 August 2006 [Porthoustock, Cornwall. CornwallHets] 18 August 1919 [Rock Sandhills, Cornwall. TSBE1:51-84] 20 August 2006 [Sedlescombe garden, VC14. Adult. HN8:10] 17 August 2009 [The Holies, Streatley, VC22. Female. ERJV124:143-145] 17 August 2005 [W. Moors plantation, VC9. Adult. HN8:10] 17 August 2009 [Warburg NR, Nettlebed, VC23. HN14:8]
- 08E: 24 August 2006 [Crabb's Cross, Redditch, Worcestershire. EMM144:163-176] 24 August 2006 [Evesham, Worcestershire. EMM144:163-176] 25 August 2011 [Homefield Wood, near Medmenham, VC24. Male. ERJV124:143-145] 23 August 2002 [Llanvihangel Gobion, Monmouthshire. EMM144:163-176] 24 August 2006 [New Forest, Hampshire. EMM144:163-176]
- 08F: 27 August 2009 [Ash Ranges, VC17. HN14:8] 29 August 2010 [Beacon Hill, Aston Rowant NNR, Chiltern Hills, VC23. Male. ERJV124:143-145] 26 August 2009 [Byfield, VC32. HN14:8] 30 August 2006 [Evesham, Worcestershire. Nymphs. EMM144:163-176] 30 August 2009 [Folkestone Warren, Kent. BJENH24:54-55] 30 August 2014 [Helmdon, Northamptonshire. Hem2:27] 27 August 2009 [Kildanes Bottom, near Bourton-on-the-Hill, VC33. HN15:13] 31 August 2017 [Kilnsea, VC61. Hem6:214] 28 August 1919 [Rock Sandhills, Cornwall. TSBE1:51-84] 31 August 2005 [St Catherines Point field, VC10. Adult. HN8:10] 27 August 2006 [Upton Towans, Cornwall. CornwallHets] 30 August 2008 [Whitecross Green Wood, VC24. Male. ERJV124:143-145]
- 09A: 2 September 2011 [Burnt Platt Wood, near Stoke Row, VC23. Males and females. ERJV124:143-145] 5 September 2014 [Darenth. BJENH29:69-88] 3 September 2005 [Duchy College, Rosewarne, Cornwall. CornwallHets] 3 September 2014 [Greenway, Stratford. BJENH29:69-88] 2 September 2002 [Holywell Dunes, Cornwall. CornwallHets] 5 September 2003 [Mansands, Brixham, VC3. Adult. HN8:10] 5 September 2013 [Near yacht club, Snettisham, VC28. Hem4:37] 4 September 2015 [Princes Risborough. BJENH29:69-88] 4 September 2014 [River Lee. BJENH29:69-88]
- 09B: 9 September 2012 [Bedford Town Park, VC30. HN19/20:11] 9 September 2012 [Braeburn Park. BJENH29:69-88] 9 September 1985 [Daymer Bay, Cornwall. CornwallHets] 9 September 2006 [Duchy College, Rosewarne, Cornwall. *In copula*. CornwallHets] 10 September 2006 [Hackney Wick, VC21. Adult. HN8:10] 7 September 2008 [High Woods, Colchester, VC19. HN14:8] 7 September 1950 [Rhossilli Bay, Glamorgan. EMM87:139] 6 September 2015 [Rossington Bridge, Doncaster, VC63. HN23:12] 9 September 2001 [Talacre, Flintshire. EMM144:163-176]
- 09C: 14 September 1928 [Arklow, Co Wicklow. IrelandHets] 11 September 2011 [Burnt Platt Wood, near Stoke Row, VC23. Male. ERJV124:143-145] 11 September 1985 [Duck Pool, Cornwall. CornwallHets] 11 September 2011 [Ipsden Wood, near Stoke Row, VC23. Male. ERJV124:143-145] 14 September 1992 [Loe Bar, Cornwall. CornwallHets] 15 September 2010 [Pencraig, near Ross-on-Wye, VC36. Male. HN16:13]
- 09D: 20 September 2009 [Colchester, VC19. HN14:8] 20 September 1992 [Holman Wood, Brede High Wood, East Sussex. BJENH10:1-2] 17 September 2015 [Marston Vale. BJENH29:69-88] 17 September 2018 [Near Cothill, VC22. Nymphs reared in culture. Hem6:221] 16 September 2002 [Newborough Warren, VC52. Adult. HN8:10]
- 09E: 25 September 2004 [Duchy College, Rosewarne, Cornwall. CornwallHets] 24 September 2006 [Porton Down, Wiltshire. EMM144:163-176] 22 September 2006 [Woolacombe Warren, VC4. Adult. HN8:10]
- 09F: 26 September 1992 [Brede High Wood, VC14. Adult. HN8:10] 27 September 1928 [Greystones, Co Wicklow. Adult and nymph. IrelandHets] 30 September 2015 [Marsham Heath, VC27. Hem4:40] 30 September 2015 [Marston Vale. BJENH29:69-88] 28 September 2012 [Padworth Recycling Centre. BJENH29:69-88]

- 10A: 3 October 2006 [Burnham Beeches, VC24. Adult. HN8:10] 1 October 2006 [Defford, Worcestershire. EMM144:163-176] 5 October 2011 [Garston, VC20. HN17/18:21] 3 October 2018 [St Nicholas Fields LNR, York, VC62. Hem6:237]
- 10B: 7 October 2006 [Ryall, Worcestershire. EMM144:163-176]
- 10C: 13 October 2006 [Dungeness, VC15. Adults and nymph. HN8:10] 12 October 2003 [Lower Woods NR, VC34. HN8:13] 12 October 2006 [Milton Common, Portsmouth, Hampshire. EMM144:163-176]
- 10E: 23 October 2006 [Evesham, Worcestershire. Adult male. EMM144:163-176] 24 October 2006 [Evesham, Worcestershire. EMM143:89] 23 October 2006 [Near Usk, Monmouthshire. Adult. EMM144:163-176] 22 October 2006 [Wigmore Rolls Wood, Herefordshire. BJENH20:192]
- 10F: 27 October 1990 [Bedgebury Forest, VC16. Adult. HN8:10] 31 October 2009 [Near Laverton, VC33. HN15:13]
- 11A: 3 November 2006 [Evesham, Worcestershire. Adult. EMM144:163-176]
- 12E: 24 December 2008 [Tywyn, VC48. Adult. HN8:10]

#### Liorhyssus hyalinus (Fabricius) (Rhopalidae)

- 05D: 20 May 1992 [Murlough NNR, Co Down. BJENH6:77]
- 05F: 29 May 1923 [Kenmare Demesne, Killarney, North Kerry. IrelandHets] 31 May 2002 [Margam Moors, Glamorgan. BJENH24:227-234] 26 May 2009 [Runnymede, Surrey. BJENH24:227-234]
- 06A: 5 June 2009 [Morfa Dyffryn, Merionethshire. Adults. BJENH24:227-234] 4 June 2009 [Newborough Warren, Anglesey. BJENH24:227-234]
- 06B: 10 June 2004 [Botley Wood, VC11. Hem3:104] 6 June 2009 [Morfa Harlech, Gwynedd. BJENH24:227-234] 8 June 2009 [Yaxley, Cambridgeshire. BJENH24:227-234]
- 06C: 11 June 2009 [Cokeham Brooks, Sompting, West Sussex. BJENH24:227-234]
- 06D: 17 June 2004 [Ashdown Forest, East Sussex. BJENH24:227-234] 17 June 2015 [Keinton Mandeville, VC6. Hem4:150] 16 June 2009 [Landwyn Island, Anglesey. Male and female. BJENH24:227-234] 16 June 1994 [St David's Head, Pembrokeshire. BJENH8:207] 20 June 2002 [Westerham Hill, Kent. BJENH24:227-234]
- 06E: 22 June 1998 [Blickling Hall Estate, Norfolk. BJENH24:227-234]
- 06F: 27 June 1903 [Portmarnock, Co Dublin. IrelandHets]
- 07A: 1 July 2000 [Head of Ennerdale Water, Cumbria. BJENH24:227-234] 2 July 2000 [Slyfield, Guildford, Surrey. Adults. BJENH24:227-234]
- 07B: 8 July 1968 [Blackheath, West Kent. EMM104:207] 8 July 2003 [Newhaven, East Sussex. BJENH17:180-181] 10 July 2011 [Witley Common, Surrey. Hem6:244]
- 07C: 15 July 2009 [Gwithian Towans, Cornwall. Adults and nymphs. BJENH24:227-234] 11 July 2009 [March, Cambridgeshire. Adults and nymphs. BJENH24:227-234] 11 July 2015 [Milestone, VC15. Hem4:152] 14 July 1999 [Porth Ceiriad SSSI, Caernarvonshire. Adults and nymphs. BJENH24:227-234] 15 July 2000 [Rotherfield Millennium Green, East Sussex. BJENH15:180] 15 July 2004 [St Dunstan's Farm, Heathfield, East Sussex. BJENH24:227-234] 15 July 2002 [Worlington Chalk Pit, West Suffolk. BJENH24:227-234]
- 07E: 23 July 2013 [Horsell Common, Woking, VC17. Adult. HN21:5]
- 07F: 28 July 2003 [Battersea Park, Surrey. BJENH17:137-141] 26 July 2009 [Dungeness, Kent. BJENH24:227-234] 28 July 1985 [Freshwater West, Pembrokeshire. Adults. BJENH24:227-234] 31 July 2013 [Queen Elizabeth Park, VC18. Adult. HN21:5] 31 July 2009 [Yaxley, Cambridgeshire. Adults. BJENH24:227-234]
- 08A: 1 August 2006 [Stowe, Buckinghamshire. BJENH24:227-234] 2 August 2006 [Upton Towans, Cornwall. Adults. BJENH24:227-234]
- 08B: 6 August 2003 [Cors Goch NNR, Anglesey. BJENH24:227-234] 9 August 2005 [Leasowe Common, Wirral, Cheshire. BJENH24:227-234]
- 08C: 14 August 2006 [B4009 road between Goring and South Stoke, VC23. HN15:11]
- 08D: 18 August 2009 [Gozzard's Ford, west of Abingdon, VC22. Males. HN15:11]
- 08E: 21 August 2003 [Amesbury Down, Wiltshire. BJENH24:227-234] 25 August 2000 [Cople Tip, Bedfordshire. Adults. BJENH24:227-234] 23 August 2013 [Hockham Pits. Great

- Hockham, VC28. Adult. HN21:5] 24 August 2009 [Nursling Substation, Hampshire. BJENH24:227-234] 22 August 2009 [Whiteford Burrows, Gower. BJENH24:227-234]
- 08F: 29 August 1958 [Braunton Burrows, North Devon. Adults and nymphs. EMM95:14]
- 09A: 5 September 2003 [Near Ardley, Hertfordshire. Male. BJENH24:227-234] 3 September 2013 [Newham, VC18. Adult. HN21:5]
- 09B: 9 September 1985 [Daymer Bay, Cornwall. BJENH24:227-234] 8 September 2003 [Freshwater East, Pembrokeshire. Adults and nymphs. BJENH24:227-234] 10 September 2003 [Gupton Burrows, Pembrokeshire. Adults and nymphs. BJENH24:227-234] 10 September 2003 [Stackpole Warren, Pembrokeshire. Adults and nymphs. BJENH24:227-234]
- 09C: 14 September 1958 [Blackheath, Kent. Adult. EMM94:287] 15 September 2010 [Marcham, VC22. HN16:12] 15 September 1996 [Sandy Heath, Bedfordshire. Adults and nymphs. BJENH10:177-178] 13 September 2006 [Thames Barrier Park East, South Essex. BJENH20:55]
- 09D: 18 September 2003 [Millyford Green, New Forest. BJENH24:227-234]
- 09E: 24 September 1903 [Near Gosfield, Essex. BJENH24:227-234]
- 10A: 4 October 2013 [Horton, Gower, VC41. Adult. HN21:5] 3 October 2013 [Near Beachamwell, VC28. Hem4:37] 3 October 1903 [Norwich. EMM40:16]

## Myrmus miriformis (Fallén) (Rhopalidae)

- 06C: 14 June 1953 [Bookham Common, Surrey. Nymphs. LondonHets] 15 June 1912 [Epping Forest, Essex. Nymph. LondonHets] 12 June 1955 [Harpenden, Hertfordshire. LondonHets]
- 06D: 19 June 1915 [Byfleet, Surrey. LondonHets] 18 June 1957 [Ruislip NR, Middlesex. Nymphs. LondonHets] 20 June 2001 [Sennen Cove, Cornwall. CornwallHets]
- 06E: 22 June 1912 [Burnham Beeches. Nymph. Butler1923] 23 June 2003 [Poldhu Cove, Cornwall. CornwallHets]
- 06F: 27 June 2011 [Bustard Vedette, VC8. Hem5:188] 26 June 1955 [Ruislip NR, Middlesex. Nymphs. LondonHets]
- 07A: 5 July 1957 [Banstead Downs, Surrey. Male and female. LondonHets] 4 July 1940 [Boxhill, Surrey. LondonHets] 2 July 1944 [Daglingworth, Gloucestershire. GloucsHets] 4 July 1989 [Nare Head, Cornwall. CornwallHets] 3 July 1896 [Near Bude, Cornwall. Male and female, both undeveloped. EMM37:49] 1 July 1945 [Rushmere Heath, Bedfordshire. EMM86:6-8] 3 July 1989 [Zone Point, St Anthony Head, Cornwall. CornwallHets]
- 07B: 10 July 1955 [Bookham Common, Surrey. Nymphs. LondonHets] 8 July 1956 [Bookham Common, Surrey. Males. LondonHets] 10 July 1989 [Glebe Cliff, Morwenstow, Cornwall. CornwallHets] 9 July 2001 [Glebe Cliff, Tintagel, Cornwall. CornwallHets] 9 July 1895 [Mickleham, Surrey. LondonHets]
- 07C: 14 July 1925 [Chalfont St Peter, Buckinghamshire. LondonHets] 13 July 1989 [Chipman Valley, Dizzard, Cornwall. CornwallHets] 11 July 1989 [Crackington Haven, Cornwall. CornwallHets] 12 July 1989 [Morwenstow, Cornwall. CornwallHets] 12 July 1989 [Northcott Mouth, Cornwall. CornwallHets] 12 July 1989 [Pentargon Cliff, Cornwall. CornwallHets] 12 July 2006 [Sandy Mouth, Cornwall. CornwallHets]
- 07D: 17 July 1955 [Aberystwyth, Cardiganshire. Female. EMM92:54-64] 20 July 1946 [Ashtead Common, Surrey. LondonHets] 18 July 1983 [Boxhill, Surrey. LondonHets] 19 July 1959 [Boxhill, Surrey. LondonHets] 16 July 1916 [Chorley Wood, Hertfordshire. LondonHets] 20 July 1970 [Chyvarloe Cliffs, Cornwall. CornwallHets] 20 July 1983 [Santon Warren, VC28. Hem4:18] 17 July 1962 [Swanscombe, Kent. Green and brown forms. LondonHets] 18 July 2013 [The Sanctuary, Pride Park, Derby, VC57. Hem3:93] 20 July 1983 [Two Mile Bottom, VC28. Hem4:18]
- 07E: 25 July 1936 [Ashford and Epsom Commons. PTSLENHS1936-37:29-30] 21 July 1970 [Caerthillian Cove, Cornwall. CornwallHets] 21 July 1970 [Kynance Cove, Cornwall. CornwallHets] 24 July 2010 [Lincoln, VC53. Hem3:84] 23 July 1957 [Near Guildford, Surrey. Macropters. Ent92:6-13] 25 July 1943 [Perrotts Brook, Gloucestershire. GloucsHets] 24 July 1956 [Ruislip NR, Middlesex. Female. LondonHets] 21 July 1983 [Santon Warren, VC28. Hem4:18] 25 July 1943 [Sapperton, Gloucestershire. GloucsHets] 23 July 1983 [Swifts Hill, Gloucestershire. GloucsHets]

- 07F: 29 July 1950 [Bookham Common, Surrey. Brachypters. LondonHets] 30 July 1980 [Clahar Bridge, Cornwall. CornwallHets] 30 July 1960 [Danbury Common, Essex. LondonHets] 31 July 1980 [Erisey Barton, Cornwall. CornwallHets] 30 July 1981 [Predannack, Cornwall. CornwallHets] 29 July 1955 [Ruislip NR, Middlesex. Males, brown and green forms. LondonHets] 26 July 1960 [Scratch Wood, near Elstree, Middlesex. LondonHets] 30 July 1943 [Shaw Common, Newent, Gloucestershire. GloucsHets] 29 July 1952 [West End Common, Surrey. LondonHets]
- 08A: 4 August 1941 [Berkhamsted, Hertfordshire. LondonHets] 4 August 1944 [Bushey, Hertfordshire. LondonHets] 1 August 1988 [Daneway Banks, Gloucestershire. GloucsHets] 3 August 2006 [Doyden Point, Cornwall. CornwallHets] 2 August 2006 [Pentire Head, Cornwall. CornwallHets] 4 August 1953 [West End Common, Surrey. LondonHets]
- 08B: 10 August 1958 [Bookham Common, Surrey. Males. LondonHets] 9 August 1958 [Bookham Common, Surrey. Males and females. LondonHets] 9 August 1980 [Chalk Lane, The King's Forest, VC26. Hem4:18] 9 August 1936 [Gomshall, Surrey. PTSLENHS1936-37:30-32] 8 August 1932 [Hartlebury Common LNR, Worcestershire. EMM133:17-26] 7 August 1935 [Ruislip Woods, Middlesex. Male. Ent71:148-153]
- 08C: 13 August 1955 [Aberystwyth, Cardiganshire. EMM92:54-64] 15 August 1946 [Ashstead, Surrey. LondonHets] 15 August 1953 [Bookham Common, Surrey. LondonHets] 12 August 1906 [Boxhill, Surrey. LondonHets] 12 August 1980 [Chalk Lane, The King's Forest, VC26. Hem4:18] 14 August 1998 [Clitters Mine, Gunnislake, Cornwall. CornwallHets] 15 August 1937 [Eynsford, Kent. LondonHets] 11 August 1899 [Wisley Common, Surrey. LondonHets] 14 August 1954 [Ystwyth valley, Cardiganshire. EMM92:54-64]
- 08D: 16 August 1948 [Bookham Common, Surrey. LondonHets] 16 August 1933 [Harefield, Middlesex. Female. Ent71:148-153] 17 August 1985 [Newborough Warren NNR, Anglesey. HSGN6:3] 17 August [Offley, near Hitchin. Macropter. Ent28:312] 16 August 1919 [Port Izaac, Cornwall. TSBE1:51-84] 20 August 1948 [Wavendon Heath, Bedfordshire. EMM86:6-8]
- 08E: 21 August 2002 [Bossiney Cliffs, Cornwall. CornwallHets] 21 August 1939 [Boxhill, Surrey. LondonHets] 22 August 1933 [Imperial College Biological Field Station, Slough. TSBE2:47-67] 24 August 2006 [Kynance Cove, Cornwall. CornwallHets] 21 August 2002 [Pendeen Old Cliff, Cornwall. CornwallHets] 23 August 2006 [Rinsey Cliffs, Cornwall. CornwallHets] 22 August 1954 [Scratch Wood, Edgware, Middlesex. Pair *in copula*. LondonHets]
- 08F: 27 August 1996 [Carn Naun Point, Cornwall. CornwallHets] 26 August 2006 [Harbour Cove, Padstow, Cornwall. CornwallHets] 30 August 1919 [Port Izaac, Cornwall. TSBE1:51-84]
- 09A: 4 September 1949 [Ash Vale, Surrey. Micropterous pair. PTSLENHS1949-50:78] 2 September 2002 [Penhale Point, Cornwall. CornwallHets] 5 September 1944 [Priory Grove Wood, Monmouthshire. EMM91:143] 1 September 2004 [River Medway, Rochester. BJENH18:209] 1 September 1955 [Ruislip NR, Middlesex. LondonHets] 5 September 1953 [Stoke Common, Buckinghamshire. LondonHets] 4 September 1933 [Woking, Surrey. LondonHets]
- 09B: 10 September 1914 [Epping Forest, Essex. LondonHets] 6 September 1988 [Hartlebury Common LNR, Worcestershire. Male green form. EMM133:17-26] 10 September 1985 [High Cliff, Cornwall. CornwallHets] 7 September 1933 [Woking, Surrey. LondonHets]
- 09C: 13 September 1953 [Bookham Common, Surrey. Males. LondonHets] 15 September 1934 [Boxhill, Surrey. Pair *in copula*. LondonHets] 13 September 1897 [Burnt Wood, Lincolnshire. Butler1923] 15 September 1962 [Darwin's Bank, Downe, Kent. LondonHets] 13 September 1912 [Epping Forest, Essex. LondonHets] 15 September 1990 [Fairplay Reservoir NR, Gloucestershire. GloucsHets]
- 09D: 19 September 1910 [Gomshall, Surrey. Female. EMM48:36-38] 19 September 1953 [Richmond Park, Surrey. LondonHets] 19 September 1956 [Ruislip NR, Middlesex. Females. LondonHets] 18 September 1957 [Stanner Rocks, Radnorshire. EMM94:183]
- 09E: 22 September 1956 [Amersham, Buckinghamshire. LondonHets]
- 09F: 26 September 1983 [Mitcham Common, Surrey. LondonHets]
- 10A: 4 October 1953 [Bookham Common, Surrey. Males. LondonHets]

## Rhopalus maculatus (Fieber) (Rhopalidae)

- 04F: 29 April 1990 [Thursley NNR, Surrey. EMM133:79-80]
- 05C: 14 May 1949 [Byfleet, Surrey. PTSLENHS1949-50:71-73]
- 05D: 20 May 1949 [Byfleet, Surrey. LondonHets]
- 05F: 31 May 1963 [Chobham Common, Surrey. LondonHets]
- 06A: 3 June 2002 [Hook Common, VC12. Adults. HN3:5] 3 June 1920 [Hurst Heath, Dorset. Ent59:84-85]
- 06B: 7 June 2008 [Wildmoor Heath NR, Crowthorne, Berkshire. Hem1:36]
- 06C: 15 June 2002 [Binnegar Quarry, Dorset. BJENH16:186]
- 06D: 18 June 1951 [West End Common, Surrey. LondonHets]
- 07D: 20 July 1951 [West End Common, Surrey. Nymph. LondonHets]
- 07E: 23 July 1950 [Near Woodfidley, New Forest. Nymphs. EMM87:172-173]
- 08B: 7 August 1950 [Bookham Common, Surrey. LondonHets]
- 08D: 16 August 2010 [Hawkhill Inclosure, near Brockenhurst, New Forest. Hem1:26] 18 August 1984 [Redgrave and Lopham Fens, VC27. Hem4:40] 17 August 1837 [Woking, Surrey. LondonHets]
- 08E: 23 August 2008 [Wildmoor Heath NR, Crowthorne, Berkshire. Hem1:36]
- 09A: 4 September 1995 [Shortheath Common, North Hampshire. EMM133:79-80]
- 09B: 8 September 1935 [Byfleet, Surrey. PTSLENHS1935-36:27-28] 10 September 1959 [Fleet Pond, Hampshire. Adults and nymphs. EMM95:287-288] 10 September 1908 [Tadnoll, Dorset. Ent47:146-147] 10 September 1951 [West End Common, Surrey. LondonHets]
- 09C: 13 September 1950 [Grimstead, Wiltshire. EMM88:45] 13 September 2008 [Wildmoor Heath NR, Crowthorne, Berkshire. Hem1:36]
- 09E: 21 September 1940 [West Byfleet. Ent74:240]
- 09F: 30 September 1994 [Conford Fen, North Hampshire. EMM133:79-80] 28 September 1954 [Woolmer Pond, Hampshire. Adults and nymphs. EMM95:287-288]
- 10D: 19 October 1919 [Camberley, Surrey. LondonHets]
- 11C: 14 November [Bookham Common, Surrey. Adults. LondonHets]

# Rhopalus parumpunctatus Schilling (Rhopalidae)

- 05E: 21 May 1952 [Between Barton Mills and Icklington, Suffolk. Female. PRESL(A)29:32-38]
- 06D: 20 June 2019 [Between Santon Warren and Two Mile Bottom, West Norfolk. Hem6:248] 20 June 2019 [Cavenham Heath, West Suffolk. Hem6:248] 17 June 2019 [Two Mile Bottom, West Norfolk. Hem6:247]
- 06E: 21 June 2019 [Near Two Mile Bottom, West Norfolk. Hem6:248]
- 07B: 7 July 1950 [Bookham Common, Surrey. LondonHets]
- 07E: 21 July 1983 [Santon Warren, VC28. Hem4:18] 23 July 1952 [Taplow, Buckinghamshire. LondonHets] 22 July 2015 [TL46, VC29. Hem3:93]
- 07F: 27 July 1899 [Byfleet, Surrey. LondonHets] 31 July 1901 [Byfleet, Surrey. LondonHets] 31 July 2015 [Millbrook. BJENH29:69-88]
- 08A: 4 August 2015 [Stewartby Pit. BJENH29:69-88] 5 August 1934 [Worlington and Freckenham, Suffolk. EMM71:113-114]
- 08C: 15 August 2015 [Amwell NR, VC20. Hem3:56] 15 August 1946 [Ashtead, Surrey. LondonHets] 12 August 1899 [Chobham, Surrey. LondonHets] 15 August 1942 [Poole, Dorset. Nymphs. EMM81:278-279]
- 08D: 18 August 1943 [Guildford, Surrey. Male. LondonHets] 19 August 2012 [Witley Common, Surrey. Hem6:244]
- 08F: 28 August 1949 [Horsell, Surrey. LondonHets] 28 August 1945 [Titchfield, Hampshire. Adults and nymphs. EMM81:278-279]
- 09A: 4 September 1949 [Ash Vale, Surrey. PTSLENHS1949-50:78] 1 September 2007 [Sandy Heath, VC30. HN11:15] 2 September 1906 [Wisley, Surrey. LondonHets]
- 09B: 9 September 1985 [Daymer Bay, Cornwall. CornwallHets] 9 September 1874 [Lymington. EMM69:234-245] 6 September 1902 [Oxshott Heath, Surrey. LondonHets]
- 09D: 19 September 1931 [Albury Down, Surrey. LondonHets] 17 September 1877 [Bournemouth. EMM69:234-245] 16 September 1945 [Woodfalls, Wiltshire. EMM88:45]

- 09F: 30 September 2015 [Millbrook. BJENH29:69-88] 28 September 2012 [Padworth Recycling Centre. BJENH29:69-88]
- 10A: 3 October 1998 [Constantine Bay, Cornwall. CornwallHets]
- 10C: 11 October 2015 [Gibraltar Point, VC54. Hem3:84]

# Rhopalus rufus Schilling (Rhopalidae)

- 04C: 13 April 1902 [Burnham, Buckinghamshire. LondonHets]
- 05B: 10 May 1952 [Farnham, Surrey. LondonHets] 10 May 1953 [Oxshott Heath, Surrey. LondonHets]
- 07D: 19 July 1997 [Crooksberry Common, Surrey. EMM134:265-266]
- 08B: 7 August 1997 [Broxhead Common, North Hampshire. EMM134:265-266] 8 August 1926 [Oxwich Bay, Glamorgan. EMM64:64]
- 08F: 27 August 2006 [Horsell Common, near Woking, Surrey. BJENH20:192]
- 09A: 3 September 1951 [Chobham Common, Surrey. LondonHets]
- 09B: 8 September 1951 [Ash Vale, Surrey. LondonHets] 9 September 1948 [Whiteparish, Wiltshire. EMM88:45]
- 09C: 13 September 1952 [Banstead Downs, Surrey. LondonHets] 15 September 1953 [Esher Common, Surrey. LondonHets]
- 09D: 19 September 1953 [Amersham, Buckinghamshire. EMM90:250] 16 September 1997 [Brancaster, VC28. Hem4:40]

# Rhopalus subrufus (Gmelin) (Rhopalidae)

- 03E: 23 March 1946 [Boddington, Gloucestershire. GloucsHets]
- 04D: 17 April 1954 [Boxhill, Surrey. LondonHets] 20 April 1944 [Rendcomb, Gloucestershire. GloucsHets]
- 04E: 24 April 1948 [Boxhill, Surrey. LondonHets] 22 April 1947 [Wrotham, Kent. LondonHets]
- 05A: 3 May 2006 [Dreasonmoor Wood, Cornwall. CornwallHets]
- 05B: 6 May 2014 [Hugglescote, railway triangle grassland, VC55. Hem3:93] 10 May 2016 [Sheringham Park, VC27. Hem4:40] 8 May 1948 [South Wiltshire. Males and a female. EMM86:26-28]
- 05C: 11 May 2003 [College Wood, VC54. Hem3:84]
- 05D: 16 May 1948 [Baker's Wood, Heath and Reach, Bedfordshire. EMM86:6-8] 18 May 1947 [Forty-foot Lane, Souldrop, Bedfordshire. EMM86:6-8] 19 May 1999 [Woolwich Common, West Kent. ERJV111:204]
- 05E: 23 May 1985 [Blackstable Wood, Gloucestershire. GloucsHets] 25 May 2010 [VC63. HN16:13]
- 05F: 31 May 1979 [Maidenhead, Berkshire. EMM114:159] 26 May 1951 [Oxshott, Surrey. LondonHets] 30 May 2006 [Tregonnett Wood, Kerney Bridge, South Hill, Cornwall. CornwallHets]
- 06A: 2 June 1945 [Ashtead, Surrey. LondonHets] 5 June 1954 [Benfleet, Essex. LondonHets] 3 June 1951 [Booker, near High Wycombe, Buckinghamshire. EMM87:236] 2 June 1951 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:236] 5 June 1993 [Hailey Wood, Gloucestershire. GloucsHets] 3 June 1985 [Minchinhampton Common, Gloucestershire. GloucsHets] 2 June 2014 [Pentimore Wood, Northamptonshire. Hem2:26] 3 June 2015 [St Nicholas Fields LNR, York, VC62. Hem6:237] 4 June 1983 [Wychwood Forest, Oxfordshire. PTBENHS17:86-87]
- 06B: 10 June 1995 [Bodmin Beacon, Cornwall. CornwallHets] 6 June 2014 [Helmdon, Northamptonshire. Hem2:26]
- 06C: 12 June 2001 [Porters Lodge Meadow LWT Reserve, VC53. Hem3:84] 14 June 1954 [Whitbarrow, near Grange-over-Sands. TSBE15:117-134]
- 06D: 19 June 1985 [Cotehele Quay, Cornwall. CornwallHets] 19 June 2014 [Helmdon, Northamptonshire. Hem2:26] 17 June 1951 [Westerham district, Kent. LondonHets]
- 06E: 25 June 2012 [Bilston, Wolverhampton, VC39. Hem3:93] 24 June 1957 [Highnam Pinetum, Gloucestershire. GloucsHets] 21 June 1947 [Orpington, Kent. LondonHets]
- 06F: 26 June 1943 [Chalford, Gloucestershire. GloucsHets]

- 07B: 7 July 1888 [G. W. (Glanvilles Wootton). EMM69:234-245]
- 07C: 14 July 2004 [Bodmin, Cornwall. CornwallHets] 15 July 1944 [Woodchester Park, Gloucestershire. GloucsHets]
- 07D: 16 July 1952 [Chipstead Valley, Surrey. LondonHets]
- 07F: 28 July 2003 [Battersea Park, Surrey. BJENH17:137-141] 27 July 2013 [Berinsfield, Oxfordshire. Adults and nymphs reared in culture. EMM150:63-64] 27 July 1950 [Boxhill, Surrey. LondonHets] 29 July 2013 [Bradwell Grove, Oxfordshire. Adults and nymphs reared in culture. EMM150:63-64] 31 July 2005 [Colchester, Essex. HN6:8] 31 July 1909 [Darenth Wood, Kent. LondonHets]
- 08B: 7 August 1950 [Bookham Common, Surrey. LondonHets] 8 August 1899 [G. W. (Glanvilles Wootton). EMM69:234-245]
- 08D: 16 August 1953 [Bookham Common, Surrey. LondonHets] 16 August 1955 [Bookham Common, Surrey. LondonHets] 16 August 1952 [Chipstead, Surrey. LondonHets] 16 August 1952 [Highnam Pinetum, Gloucestershire. GloucsHets] 19 August 2015 [St Nicholas Fields LNR, York, VC62. Hem6:237] 19 August 1949 [Woking, Surrey. LondonHets]
- 08E: 22 August 1964 [Brook, Kent. PTSLENHS1964:37-38] 21 August 1904 [Darenth Wood, Kent. LondonHets] 21 August 1993 [Uley Bury, Gloucestershire. GloucsHets]
- 08F: 28 August 1926 [Bishopstoke, Hampshire. HantsHets] 27 August 1950 [Boxhill. PTSLENHS1950-51:77-78] 28 August 1945 [Singleton, Sussex. EMM82:199-200]
- 09A: 1 September 1952 [Esher Common, Surrey. LondonHets] 4 September 1950 [Grounds of the Pest Infestation Laboratory, Slough. EMM87:201]
- 09B: 7 September 1944 [Chesterton, Gloucestershire. GloucsHets] 6 September 1953 [Epsom Common, Surrey. LondonHets] 9 September 1944 [Great Gaddesden, Hertfordshire. Nymphs. EMM81:163-164] 9 September 1944 [King's Wood, Bedfordshire. EMM86:6-8] 10 September 2015 [TL46, VC29. Hem3:93] 8 September 1991 [Whelford Pools, Gloucestershire. GloucsHets] 10 September 1985 [Widemouth Bay, Cornwall. CornwallHets]
- 09C: 13 September 1953 [Bookham Common, Surrey. LondonHets] 15 September 1953 [By Black Pond, Esher Common, Surrey. LondonHets] 15 September 1962 [Darwin's Bank, Downe, Kent. LondonHets] 14 September 1944 [Effingham, Surrey. LondonHets]
- 09E: 25 September 1955 [Bean, Kent. LondonHets] 22 September 1951 [Boxhill, Surrey. LondonHets] 24 September 1993 [Hartlebury Common LNR, Worcestershire. EMM133:17-26]
- 10A: 4 October 1950 [Grounds of Pest Infestation Laboratory, Slough. LondonHets] 2 October 1943 [Hilcot, Gloucestershire. GloucsHets]
- 10B: 6 October 1962 [Addington, Surrey. PTSLENHS1962:104] 9 October 1903 [Gomshall, Surrey. LondonHets]
- 10C: 15 October 1985 [Perrott's Brook Marsh, Gloucestershire. GloucsHets]
- 11B: 8 November 1945 [Near Deadmansea Wood, Bedfordshire. EMM86:6-8]

#### Stictopleurus abutilon (Rossi) (Rhopalidae)

- 05B: 8 May 2007 [Oxford, VC23. ERJV125:74-76]
- 05E: 22 May 2005 [Near Dartford Tunnel, Kent. HN6:8]
- 06D: 20 June 2019 [Between Santon Warren and Two Mile Bottom, West Norfolk. Hem6:248] 20 June 2019 [Cavenham Heath, West Suffolk. Hem6:248] 16 June 2019 [Near the level crossing north of Santon Downham, West Norfolk. Hem6:246] 20 June 2007 [VC16. HN11:12]
- 06E: 21 June 2019 [Near Two Mile Bottom, West Norfolk. Hem6:248]
- 06F: 30 June 2005 [Cuxton Pit, VC16. Male. HN6:9] 30 June 2006 [Cuxton Pit, VC16. Male. HN11:12]
- 07B: 10 July 2003 [Tilbury Environmental Centre site, VC18. ERJV116:118-190]
- 07E: 24 July 2006 [Finemere Wood, VC24. ERJV125:74-76] 22 July 2011 [Portsdown, near Paulsgrove, South Hampshire. BJENH25:174] 25 July 2000 [Woolwich, Kent. BJENH14:168]
- 07F: 28 July 2003 [Battersea Park, Surrey. BJENH17:137-141] 31 July 2005 [Colchester, Essex. HN6:8] 30 July 1998 [West Mersea, St Peters Well, VC19. ERJV116:118-190]
- 08A: 4 August 2015 [Stewartby Pit. BJENH29:69-88]

- 08B: 7 August 2005 [M20 verge, VC16. Hem4:152] 10 August 2001 [Middlewick Ranges, Colchester, VC19. ERJV116:118-190] 7 August 2006 [RHS Garden, Hyde Hall, near Rettenden, Essex. BJENH20:192]
- 08C: 14 August 2006 [B4009 road between Goring and South Stoke, VC23. HN15:11] 11 August 2000 [Broom Hill, near West Tilbury, South Essex. ERJV116:118-190] 14 August 1996 [Essex Filter Beds, Essex. ERJV116:118-190] 15 August 1996 [Oakhanger, North Hampshire. BJENH10:178-179] 15 August 2003 [Orsett Camp Sand Pit, VC18. ERJV116:118-190] 15 August 1996 [Shortheath Common, North Hampshire. BJENH10:177]
- 08D: 18 August 2003 [Former Royal Ordnance site, VC18. ERJV116:118-190] 20 August 2002 [Hornchurch Country Park, VC18. ERJV116:118-190]
- 08E: 24 August 1996 [Maulden Wood, Bedfordshire. Mating pair. EMM133:261-262]
- 08F: 26 August 2005 [Old Winchester Hill, VC 11. HN6:14]
- 09A: 1 September 2007 [Belveder, VC16. Hem4:152] 2 September 1997 [Bittacy Hill, Middlesex. EMM134:265-266] 4 September 2003 [Down House, Downe, West Kent. BJENH17:181-182] 4 September 2014 [Hackney Marsh. BJENH29:69-88] 2 September 2005 [The Moors, Colchester, Essex. HN6:8] 3 September 2015 [TL78, VC26. Hem3:93]
- 09B: 9 September 2003 [Near Waterford, Hertfordshire. HN4:7] 7 September 2004 [Siston Common, Bath, VC6. HN6:8]
- 09C: 13 September 1948 [Ashtead, Surrey. Female. EG29:261-264]
- 09D: 17 September 2006 [Drakes Broughton, Worcestershire. Immature adult female. EMM143:89]
- 09E: 24 September 2013 [Cranwich Heath, VC28. Hem4:37] 23 September 2006 [Drakes Broughton, Worcestershire. EMM143:89] 24 September 2006 [Drakes Broughton, Worcestershire. Nymphs reared in culture. EMM143:89] 24 September 2018 [Worminghall, Buckinghamshire. Hem6:221]
- 09F: 28 September 2011 [Hitchcopse Pit, near Dry Sandford, VC22. ERJV125:74-76] 30 September 2015 [Marston Vale. BJENH29:69-88]
- 10A: 5 October 2013 [Near Twyning, Gloucestershire. HN22:8] 5 October 1999 [West Acton, Middlesex. BJENH14:168]
- 10B: 10 October 1822 [Hurn, Dorset. Male. EG29:261-264]
- 10C: 13 October 2003 [Dry Street, Basildon, South Essex. Adults. BJENH17:181-182] 13 October 1996 [North Hampshire. Nymph. BJENH10:178-179]
- 10E: 24 October 2006 [Evesham, Worcestershire. EMM143:89]
- 11A: 1 November 2004 [Gallions Reach, Beckton. BJENH18:209]

## Stictopleurus punctatonervosus (Goeze) (Rhopalidae)

- 04F: 26 April 2004 [Rochester. BJENH18:209]
- 05B: 8 May 2005 [Centre Parcs, Elveden, Suffolk. BJENH19:189-190]
- 05C: 13 May 2015 [Padworth Recycling Centre. BJENH29:69-88]
- 05D: 17 May 1869 [Holm Bush, Sussex. Female. EG29:261-264] 18 May 2002 [Wicken Fen Carpark, VC29. Hem4:144]
- 05E: 22 May 2013 [Padworth Recycling Centre. BJENH29:69-88]
- 05F: 28 May 2003 [Cuxton Pit, VC16. ERJV116:118-190] 27 May 2019 [Woodwalton Marsh Nature Reserve, VC31. Hem6:270]
- 06A: 4 June 2004 [Botley Wood, Hampshire. Nymph. BJENH18:208] 2 June 2004 [Whiteley, Hampshire. BJENH18:208]
- 06C: 15 June 2004 [Rochester. BJENH18:209]
- 06D: 16 June 2019 [Barton Mills Travelodge, West Suffolk. Hem6:246] 20 June 2019 [Between Santon Warren and Two Mile Bottom, West Norfolk. Hem6:248] 18 June 2004 [Chelsea Harbour. BJENH18:209] 18 June 2014 [Darenth. BJENH29:69-88] 16 June 2003 [Former Royal Ordnance site, VC18. ERJV116:118-190] 18 June 2019 [Icklingham Plains, West Suffolk. Hem6:247]
- 06F: 28 June 2003 [West Thurrock PFA lagoons, VC18. ERJV116:118-190]
- 07A: 2 July 1950 [Brockenhurst. PTSLENHS1950-51:71-72] 5 July 2001 [Osilid Works, Colchester, VC19. ERJV116:118-190]

- 07B: 8 July 1998 [Bexley, VC16. ERJV116:118-190] 9 July 2001 [Mayfield, East Sussex. BJENH15:180] 7 July 2003 [Orsett Camp Sand Pit, VC18. ERJV116:118-190] 9 July 2003 [Sandon Pits, VC18. ERJV116:118-190] 9 July 2003 [Sue Godfrey Nature Park, Deptford. Adult and nymphs. BJENH17:181-182] 7 July 1998 [Woodlands Farm, Bexley, VC16. ERJV112:267-268]
- 07C: 15 July 2005 [Claybrookes Marsh, VC38. Hem3:93] 11 July 2011 [Oxenbourne NR, Queen Elizabeth Country Park, near Petersfield, South Hampshire. BJENH25:174]
- 07D: 19 July 2004 [Chelsea Harbour. BJENH18:209] 18 July 2003 [Former Royal Ordnance site, VC18. ERJV116:118-190] 18 July 2002 [Red Lodge, VC26. ERJV116:118-190] 17 July 1997 [The Moors, Colchester, VC19. ERJV111:135-136] 19 July 2006 [Whitecross Green Wood, VC24. ERJV125:74-76]
- 07E: 24 July 2010 [Lincoln, VC53. Hem3:84]
- 07F: 31 July 2005 [Colchester, Essex. HN6:8] 26 July 2001 [Isle of Dogs, VC21. ERJV116:118-190]
- 08A: 3 August 2015 [A16 Cowbridge drain, Boston, VC54. Hem3:84] 1 August 2006 [Bernwood Forest, VC24. ERJV125:74-76] 1 August 2001 [Kennett, VC26. ERJV116:118-190] 2 August 2009 [Moor Copse, VC22. ERJV125:74-76]
- 08B: 6 August 2005 [Between Fleet and Farnborough, North Hampshire. HN6:8] 9 August 2012 [Bilston, Wolverhampton, VC39. Hem3:93] 8 August 2000 [River Thames, next to Chelsea Power Station, VC21. ERJV112:267-268]
- 08C: 14 August 2006 [B4009 road between Goring and South Stoke, VC23. HN15:11] 14 August 2005 [Beeston Sidings LNR, Nottinghamshire. HN6:8] 13 August 2001 [Pitsea Untidy Industries, VC18. ERJV116:118-190] 13 August 2006 [Wandsworth Common, London. BJENH20:213-216]
- 08D: 20 August 2003 [Anchor Field, VC18. ERJV116:118-190] 19 August 2009 [Fisherlane Wood, Surrey. ERJV125:74-76] 16 August 2000 [River Thames, next to Chelsea Power Station, VC21. Adults and nymphs. ERJV112:267-268] 20 August 1998 [Woodlands Farm, Bexley, VC16. ERJV112:267-268]
- 08E: 23 August 2001 [Pitsea Untidy Industries, VC18. ERJV116:118-190] 22 August 2003 [Queens Park, Billericay, VC18. ERJV116:118-190]
- 08F: 26 August 2003 [Cuxton Pit, VC16. ERJV116:118-190] 27 August 2010 [Near Thorne Moor, VC63. HN19/20:12]
- 09A: 5 September 2014 [Darenth. BJENH29:69-88] 5 September 2003 [Deptford. BJENH17:181-182] 1 September 2004 [Rochester. BJENH18:209] 5 September 2003 [Sue Godfrey Nature Park, Deptford. Adult. BJENH17:181-182] 2 September 2005 [The Moors, Colchester, Essex. HN6:8]
- 09B: 9 September 2003 [Near Waterford, Hertfordshire. HN4:7]
- 09C: 11 September 2003 [Grays, VC18. ERJV116:118-190] 15 September 2003 [Medway Valley Park, VC16. ERJV116:118-190] 13 September 2003 [Swanscombe Peninsula, VC16. ERJV116:118-190]
- 09D: 20 September 2003 [Burridge, VC11. HN3:5] 17 September 2018 [Near Cothill, VC22. Nymphs reared in culture. Hem6:221] 17 September 2018 [Near North Stoke, VC23. Hem6:219] 17 September 2015 [Stewartby Pit. BJENH29:69-88]
- 09E: 21 September 2003 [Dering Wood, VC15. ERJV116:118-190] 24 September 2006 [Drakes Broughton, Worcestershire. EMM143:89] 21 September 2003 [Headcorn, River Beult, VC15. ERJV116:118-190] 21 September 2000 [The Moors, Colchester, VC19. ERJV112:267-268] 23 September 1997 [West Bergholt Heath, West Bergholt, VC19. ERJV111:135-136] 24 September 2018 [Worminghall, Buckinghamshire. Hem6:221]
- 09F: 26 September 2003 [Canvey Northwick, VC18. ERJV116:118-190] 29 September 2014 [Corby, Brookfield Plantation, VC32. Hem3:93] 29 September 2011 [Enstone, Oxfordshire. EMM149:136-137] 29 September 2003 [Ifield, West Sussex. BJENH17:181-182] 30 September 2015 [Marston Vale. BJENH29:69-88] 30 September 2015 [Millbrook. BJENH29:69-88] 26 September 2001 [Osilid Works, Colchester, VC19. ERJV116:118-190] 28 September 2012 [Padworth Recycling Centre. BJENH29:69-88] 26 September 2018 [St

Nicholas Fields LNR, York, VC62. Hem6:237] 28 September 2008 [Swanton Novers Wood NNR, VC28. HN12:18]

10A: 1 October 2008 [Glandford, VC27. HN15:13] 5 October 1999 [West Acton, VC21. ERJV112:267-268]

10B: 10 October 2013 [Bishop's Cleeve, Gloucestershire. HN22:8] 6 October 2013 [Near Great Rissington, Gloucestershire. HN22:8]

10C: 13 October 2003 [Dry Street, Basildon, South Essex. Adults and nymphs. BJENH17:181-182] 12 October 2005 [Woodmancote, Gloucestershire. GloucsHets]

10D: 18 October 2003 [Cornard Mere, VC26. ERJV116:118-190]

10E: 21 October 2003 [Stratford Marsh, VC18. ERJV116:118-190]

10F: 29 October 2003 [Holly Road, Stanway, VC19. ERJV116:118-190]

11A: 1 November 2004 [Gallions Reach, Beckton. BJENH18:209]

11B: 7 November 2018 [St Nicholas Fields LNR, York, VC62. Hem6:237]

#### **Detailed records**

Brachycarenus tigrinus (Schilling) (Rhopalidae)

Sweeping tall vegetation in the corner of an arable field [Barnham, West Suffolk. 19 June 2019. Hem6:247]

Sweeping and searching at the roots of plants on a sandy field corner [Icklingham Plains, West Suffolk. 18 June 2019. Hem6:247]

Sweeping, suction-sampling and searching at the roots of plants on a sandy field corner [Icklingham Plains, West Suffolk. 20 June 2019. Hem6:248]

Sweeping areas of sorrel and heather/heath amid a dirt-bike track, and mixed vegetation at the perimeter [Near Thetford, West Norfolk. 21 June 2019. Hem6:248]

Sweeping a track through woodland and clearing [Near Two Mile Bottom, West Norfolk. 21 June 2019. Hem6:248]

Sweeping a brownfield site [Swanscombe Marshes, West Kent. 21 June 2006. BJENH20:55]

Sweeping a large stand of Dittander (*Lepidium latifolium*) on a disused railway siding [Purfleet, South Essex. 11 July 2005. HN6:10]

Sweeping and suction sampling sparse straggling weeds amid bare sandy ground [Battersea Park, Surrey. 28 July 2003. BJENH17:137-141]

On the recorder's wife [Bawdsey Ferry beach, Suffolk. 16 August 2005. BJENH20:191]

Beating Lawson Cypress [Headington Hill Park, Oxford, VC23. 22 August 2006. ERJV125:135-136]

Sweeping brownfield habitat [Dagenham, Essex. 30 August 2005. HN6:10]

Sweeping a brownfield site [Greenway, Stratford. 4 September 2014. BJENH29:69-88]

Sweeping a brownfield site [Hackney Marsh. 3 September 2014. BJENH29:69-88]

Sweeping [Belvedere, West Kent. 13 September 2006. BJENH20:55]

Sweeping [Thames Barrier Park East, South Essex. 13 September 2006. BJENH20:55]

On the outside of a moving car window [Woolwich, West Kent. 13 September 2006. BJENH20:55]

#### Chorosoma schillingii (Schilling) (Rhopalidae)

On marram [Porth Joke, Cornwall. 5 July 2003. Nymph. CornwallHets]

From Marram-grass on sandhills [Camber sandhills. 10 July 1923. Nymphs. EMM59:203-204]

On a scrappy railway embankment [East Ham, VC18. 8 July 1999. ERJV115:229]

On marram grass [Freshwater, Merseyside. 11 July 1984. ERJV97:147]

On marram grass [Freshwater, Merseyside. 14 July 1982. ERJV97:147]

In arable fields [West Pentire, West Cornwall. 11 July 2003. BJENH18:165-170]

Sweeping mixed vegetation along sandy tracks [Thursley Common, Surrey. 23 July 2011. Adults. BJENH25:176-177]

Sweeping along the edge of a large stand of Rosebay Willowherb in a dune slack [Eskmeals Dunes NR, Cumberland. 4 August 1984. ERJV97:8]

On sandhills [Porthcawl, Glamorgan. 5 August 1926. EMM64:64]

On marram grass [Sandscale Hawes Warren, Cumbria. 3 August 1975. ERJV97:147]

Sweeping grass at a disused mineral tip site [Near Coventry, Warwickshire. 7 August 1986.

Female. EMM124:80]

Sweeping a derelict, overgrown wharf [River Thames, Lotts Road Power Station, VC21. 8 August 2000. ERJV115:229]

Sweeping very dry grassland [Rauceby Warren, Lincolnshire. 14 August 1982. EMM120:177]

Amongst sparse grass and ruderal vegetation in disused brick pits [Near Farcet, Huntingdonshire. 16 August 1987. EMM127:250]

Sweeping a roadside verge [Abbots Ripton, VC31. 21 August 1985. EMM127:250]

On marram grass [Sandscale Hawes Warren, Cumbria. 4 September 1977. ERJV97:147]

Inland fen [Wangford Fen, Suffolk. 8 September 1973. PTBENHS6:103]

Brownfield site [Borax Factory Works, Erith, West Kent. 14 September 2006. BJENH20:193-194]

Brownfield site [Brent Railway Sidings, Cricklewood, Middlesex. 19 September 2006.

BJENH20:193-194]

Sweeping Marram grass on sand-hills [Anglesey. September 1923. Including male and female. EMM60:37-39]

From dune grasses [Beacon Lagoons Nature Reserve, VC61. 2003. HN2:8]

In flight on sand hills [Berrow, Somerset. September 1953. Male. EMM91:75]

From an abandoned metalliferous mine site [Binner Downs, near Leedstown, West Cornwall. 1994-2007. BJENH21:205-214]

Coastal sand-dunes [Britain. S&L1959]

Sweeping *Psamma* on sandhills [Camber sandhills. EMM21:19-20]

Sweeping amongst coarse herbage [Camber sandhills. September. EMM17:67-68]

On long grasses [Deal. August. D&S1865]

Rushes [Deal. EMM26:81-82]

On sand-hills [Deal. September. EMM7:184-185]

In an abandoned clay pit [Dogsthorpe, Peterborough. July 1967. EG19:8]

On *Psamma arenaria* [Ferryside, Carmarthenshire. EMM48:108-111]

Sand hills [Freshwater Bay, Pembrokeshire. 1866. EMM3:92]

In tall grassland amongst scrub on a gentle chalk slope on a golf course [Gog-Magog Golf Course, near Cambridge. EMM127:250]

On sandhills by the sea-coast [Lowestoft. Saunders 1892]

Sweeping marram grass on the sandhills [North Denes, Great Yarmouth. July 1905.

PSLENHS1905-06:85]

On dry grassy waste ground [Outskirts of Canterbury, Kent. EMM120:177]

From dunes [Pembrey, Carmarthenshire. August 1991. HSGN11:8]

From rough grassland on a river embankment [River Thames, next to Chelsea Power Station, VC21. August 2000. ERJV112:267-268]

On a clump of marram grass [Southwold, Suffolk. 1960. ERJV72:261-263]

Among marram grass [Southwold, Suffolk. July. Nymphs. SuffolkHets]

On Psamma arenaria [St Helens, Isle of Wight. August 1926. EMM63:41-42]

In culture, laid egg on stalk of *Psamma arenaria* [Studland. Female. EMM48:36-38]

In a marsh [Swalecliffe, Kent. August 1897. EMM33:236]

Sand dunes [Wales. HN9:4]

On marram grass [Yarmouth. July. Ent38:261]

## Corizus hyoscyami (Linnaeus) (Rhopalidae)

Beating juniper [Windsor Hill Reserve, near Princes Risborough, VC24. 16 March 2009. Adult. HN13:91

In a garden [Peterborough, VC32. 10 April 2010. Adult. HN15:11]

In a garden [Burford, VC23. 19 April 2007. HN9:13]

On Taraxacum inflorescence [Gore Hill, Dorset. 30 April 1999. EMM144:163-176]

On dunes [Morfa Harlech. 3 May 1999. Adults. EMM144:163-176]

Sweeping a brownfield site [Braeburn Park. 7 May 2014. BJENH29:69-88]

On Ramping Fumitory (*Ceratocapnus claviculata*) in acid woodland [Friston, Suffolk. 9 May 2002. EMM144:163-176]

Corydalis in acid woodland [Friston, VC25. 9 May 2002. Adult. HN8:10]

Railway sidings [Avonmouth Docks, VC34. 18 May 2005. Adult. HN8:10]

Scuttling about amongst short grass on sandhills [Llanbedrog to Abersoch, Caernarvonshire. 23 May 1959. ERJV71:220-221]

Sweeping [Ventnor storage depot, VC10. 28 May 2006. Female. HN8:10]

From brownfield site [Bletchley, Blue Lagoon. 12 June 2015. BJENH29:69-88]

Sand dunes [Braunton Burrows, North Devon. 15 June 1989. BJENH4:119-121]

Sonchus head [Peveril Point, VC9. 14 June 2005. Adult. HN8:10]

Dunes [Sennen Cove, Cornwall. 12 June 1995. CornwallHets]

Amongst Anthyllis vulnerata on sandhills [Bude, Cornwall. 18 June. Female. Ent88:33-36]

On the wing on the edge of a cliff [Near Black Hole, Boscastle, Cornwall. 19 June 1898. TSBE1:51-84]

Sweeping restharrow [Pitsdown Hill, Buckinghamshire Chilterns. 19 June 2012. Adults. Hem1:28] In rough ruderal grassland [VC16. 20 June 2007. HN11:12]

On ox-eye daisy flowerheads on dry seacliff grassland [Porthlysgi Cliffs, Wales. 23 June 1994. BJENH9:3-5]

Euphorbia [Samphire Hoe cliff slope, VC15. 23 June 1998. Adult. HN8:10]

Picris on tunnelling spoil [Samphire Hoe, VC15. 23 June 1998. Adult. HN8:10]

Sandy seacliffs [Stoke Point, Noss Mayo, Devon. 21 June 1990. BJENH4:43]

Sand dunes [Cahore Point, VCH12. 28 June 2006. Adult. HN8:10]

On Fuchsia in garden [Tremorva Hayle, Cornwall. 3 July 2006. CornwallHets]

Sandhills [Cahore, Co Wexford. 10 July 1927. IrelandHets]

Under *Ononis* on sand dunes [Poppit Sands, VC45. 8 July 1990. Adult. HN8:10]

Sweeping restharrow (*Ononis repens*) [Pitstone Hill, Chiltern Hills, VC24. 14 July 2011. Female. ERJV124:143-145]

Sandhills, on *Ononis* [Arklow, Co Wicklow. 20 July 1926. Adult and nymph. IrelandHets]

Cirsium head [Pamber Forest woodland, VC12. 16 July 2006. Adult. HN8:10]

Sweeping a pond edge [The Chase, Woolton Hill VC12. 18 July 2011. Male. ERJV124:143-145]

In a garden [Worsbrough Common, Barnsley, VC63. 17 July 2013. Adult. HN21:5]

Sweeping a brownfield site [Greenway, Stratford. 23 July 2014. BJENH29:69-88]

Sandhills [Kilgorman, Co Wexford. 21 July 1927. IrelandHets]

Sweeping large stands of Restharrow on a landscaped river bank [River Lee. 21 July 2014. Adults and nymphs. BJENH29:69-88]

On *Matricaria recutita* at the edge of a cereal field [South of Burton Pidsea village, VC61. 24 July 2011. Male. HN17/18:22]

Beating Round-leaved Cranesbill (*Geranium rotundifolium*) growing in the gaps between the concrete sections of a disused airfield [Worminghall, Buckinghamshire. 21 July 2013. Adults and nymphs reared in culture. EMM150:63-64]

Beating Round-leaved Cranesbill (*Geranium rotundifolium*) growing along a field edge [Berinsfield, Oxfordshire. 27 July 2013. Adults and nymphs reared in culture. EMM150:63-64]

Sweeping a woodland ride [Botany Bay Wood, near Chiddingfold, Surrey. 31 July 2011. Male. ERJV124:143-145]

Shaking Round-leaved Cranesbill (*Geranium rotundifolium*) growing at the edge of the runway of a disused airfield [Bradwell Grove, Oxfordshire. 29 July 2013. Nymphs reared in culture. EMM150:63-64]

Sweeping a fallow field [Hitchcopse Pit, near Dry Sandford, VC22. 28 July 2011. Males and females. ERJV124:143-145]

From brownfield site [Marston Vale. 31 July 2015. BJENH29:69-88]

Old sand quarry [Morville, VC40. 27 July 2006. Adult. HN8:10]

Sweeping thistles [Rushbeds Forest, VC24, 28 July 2006, Male, ERJV124:143-145]

Sweeping a woodland ride [Bernwood Forest, VC24. 1 August 2006. Adult. ERJV124:143-145]

Sweeping a woodland ride [Burnt Platt Wood, near Stoke Row, VC23. 2 August 2011. Males and females. ERJV124:143-145]

On an area of Spear Thistle (*Cirsus vulgaris*), Nettle (*Urtica* sp.) & Groundsel (*Senecio vulgaris*) [Dunwich Forest, VC25. 5 August 2010. Adults. HN16:10]

From brownfield site [Kempston Hardwick. 4 August 2015. BJENH29:69-88]

Sandhills [Magherabeg, Co Wicklow. 1 August 1927. IrelandHets]

Sweeping a lake edge [Near Stanton St John, VC23. 5 August 2011. Female. ERJV124:143-145]

Sweeping a brownfield site [Olympia, London. 3 August 2015. BJENH29:69-88]

Woodland [Perivale Wood, VC21. 5 August 2006. Adult. HN8:10]

Sweeping a pond edge [Spartum Fen, near Latchford, VC23. 2 August 2007. Female. ERJV124:143-145]

On Ononis [Ventnor. 1 August. D&S1865]

On thistle head [Bernwood Forest, VC24. 8 August 2005. Female. ERJV124:143-145]

On the receptacle of a Creeping Thistle (*Cirsium arvense*) [Duck End NR, Maulden, Bedfordshire. 7 August 2006. EMM144:163-176]

From vegetation on the coastal sand/mud [Kilnsea, VC61. 6 August 2018. Hem6:214]

Former colliery pit [Moorends, Doncaster, VC63. 7 August 2013. Adult. HN21:5]

Sweeping a woodland ride [Near Birch Hall, Langdale Forest, North York Moors. 8 August 2018. Hem6:215]

Sweeping *Matricaria* in a disused portion of an arable field [Near Sands Farm, Sunk Island, Plain of Holderness, VC61. 10 August 2018. Hem6:216]

Cirsium et al. on field margin [Roundbush, Mundon, VC18. 9 August 2006. Adult. HN8:10]

On inflorescence of *Pulicaria* [South Essex. 10 August 2006. Adult. EMM144:163-176]

Cirsium et al. in field margin [Wrentham, Beccles, VC25. 8 August 2006. Adults. HN8:10]

Daucus head [Chapman's Pool, VC9. 11 August 2005. Adult. HN8:10]

On a fir (Abies) [Clifton Heath, Oxfordshire. 15 August 2014. Hem2:58]

Ononis [Egmont Bight, VC9. 11 August 2005. Adults. HN8:10]

Sweeping a fallow field [Hitchcopse Pit, near Dry Sandford, VC22. 13 August 2011. Male and females. ERJV124:143-145]

Sweeping hillside pasture [The Holies, Streatley, VC22. 13 August 2009. Female. ERJV124:143-145]

Sweeping hillside pasture [The Holies, Streatley, VC22. 14 August 2006. Male. ERJV124:143-145]

Sweeping a woodland clearing [Whitecross Green Wood, VC24. 15 August 2008. Female. ERJV124:143-145]

Roadside *Rubus* leaves [Braunton, VC4. 19 August 2006. Adults. HN8:10]

From a garden [Caistor, VC54. 17 August 2010. Hem3:84]

On inflorescence of Tripleurospermum [Dorset. 16 August 2005. Adult. EMM144:163-176]

Inula flower on cliff [Galit y Mor, Lleyn, VC49. 19 August 2005. Adult. HN8:10]

Matricaria s.l. [Holt Heath, VC9. 17 August 2005. Adult. HN8:10]

Spruce foliage in parkland [Marcham Park, VC22. 16 August 2006. Adult. HN8:10]

Sand dunes [Newborough Warren, VC52. 17 August 1985. Adults and nymphs. HN8:10]

Senecio [Sedlescombe garden, VC14. 20 August 2006. Adult. HN8:10]

Sweeping hillside pasture [The Holies, Streatley, VC22. 17 August 2009. Female. ERJV124:143-145]

Cirsium calvx [W. Moors plantation, VC9. 17 August 2005. Adult. HN8:10]

On a dwarf conifer in a garden [Crabb's Cross, Redditch, Worcestershire. 24 August 2006. EMM144:163-176]

In flight in an urban street [Evesham, Worcestershire. 24 August 2006. EMM144:163-176]

Sweeping a woodland ride [Homefield Wood, near Medmenham, VC24. 25 August 2011. Male. ERJV124:143-145]

Copulating on Yarrow (*Achillea millefolium*) [New Forest, Hampshire. 24 August 2006. EMM144:163-176]

Beating juniper (*Juniperus communis*) [Beacon Hill, Aston Rowant NNR, Chiltern Hills, VC23. 29 August 2010. Male. ERJV124:143-145]

In a garden [Byfield, VC32. 26 August 2009. HN14:8]

On cultivated *Erodium* (*E. manescavi*) in a garden [Evesham, Worcestershire. 30 August 2006. Nymphs. EMM144:163-176]

Sweeping along a dismantled railway line [Helmdon, Northamptonshire. 30 August 2014. Hem2:27]

Sweeping grass [Kildanes Bottom, near Bourton-on-the-Hill, VC33. 27 August 2009. HN15:13]

Under restharrow and stork's-bill [Upton Towans, Cornwall. 27 August 2006. CornwallHets]

Sweeping a woodland clearing [Whitecross Green Wood, VC24. 30 August 2008. Male. ERJV124:143-145]

Sweeping a woodland ride [Burnt Platt Wood, near Stoke Row, VC23. 2 September 2011. Males and females. ERJV124:143-145]

Sweeping a brownfield site [Darenth. 5 September 2014. BJENH29:69-88]

Sweeping a brownfield site [Greenway, Stratford. 3 September 2014. BJENH29:69-88]

Sweeping a brownfield site [Princes Risborough. 4 September 2015. BJENH29:69-88]

Sweeping a brownfield site [River Lee. 4 September 2014. BJENH29:69-88]

From along perennial flower bed in an ornamental park [Bedford Town Park, VC30. 9 September 2012. HN19/20:11]

Sweeping a brownfield site [Braeburn Park. 9 September 2012. BJENH29:69-88]

Artemisia in woodland [Hackney Wick, VC21. 10 September 2006. Adult. HN8:10]

In an area of tall, mixed herbaceous vegetation [High Woods, Colchester, VC19. 7 September 2008. HN14:8]

Under Euphorbia [Rhossilli Bay, Glamorgan. 7 September 1950. EMM87:139]

Underneath the rosette of a large bushy plant of common stork's-bill on disturbed ground [Rossington Bridge, Doncaster, VC63. 6 September 2015. HN23:12]

Sweeping a woodland ride [Burnt Platt Wood, near Stoke Row, VC23. 11 September 2011. Male. ERJV124:143-145]

Beating spruce (*Picea*) [Ipsden Wood, near Stoke Row, VC23. 11 September 2011. Male. ERJV124:143-145]

On a Lawson's Cypress in a garden [Pencraig, near Ross-on-Wye, VC36. 15 September 2010. Male. HN16:13]

In a garden [Colchester, VC19. 20 September 2009. HN14:8]

Sweeping a sheltered heathy woodland clearing [Holman Wood, Brede High Wood, East Sussex. 20 September 1992. BJENH10:1-2]

From brownfield site [Marston Vale. 17 September 2015. BJENH29:69-88]

From vegetation growing in a sandy area of a filled-in quarry [Near Cothill, VC22. 17 September 2018. Nymphs reared in culture. Hem6:221]

Conifer plantation [Newborough Warren, VC52. 16 September 2002. Adult. HN8:10]

In gardens [Duchy College, Rosewarne, Cornwall. 25 September 2004. CornwallHets]

On juniper (*Juniperus communis*) [Porton Down, Wiltshire. 24 September 2006. EMM144:163-176]

Aster on foreshore [Woolacombe Warren, VC4. 22 September 2006. Adult. HN8:10]

Sweeping heathy clearing [Brede High Wood, VC14. 26 September 1992. Adult. HN8:10]

On *Ononis* on rail embankment [Greystones, Co Wicklow. 27 September 1928. Adult and nymph. IrelandHets]

From brownfield site [Marston Vale. 30 September 2015. BJENH29:69-88]

Sweeping a brownfield site [Padworth Recycling Centre. 28 September 2012. BJENH29:69-88]

Cirsium in scrubby bog [Burnham Beeches, VC24. 3 October 2006. Adult. HN8:10]

On a garden path [Defford, Worcestershire. 1 October 2006. EMM144:163-176]

In a garden [Garston, VC20. 5 October 2011. HN17/18:21]

On clothes drying on a washing line [Ryall, Worcestershire. 7 October 2006. EMM144:163-176]

Erodium on sand ridge [Dungeness, VC15. 13 October 2006. Adults and nymph. HN8:10]

Copulating on the foliage of Blackberry (*Rubus fructicosus*) [Milton Common, Portsmouth, Hampshire. 12 October 2006. EMM144:163-176]

On cultivated *Erodium* (*E. manescavi*) in a garden [Evesham, Worcestershire. 23 October 2006. Adult male. EMM144:163-176]

Sunning on a house wall [Evesham, Worcestershire. 24 October 2006. EMM143:89]

In the interstices of angular crushed rock spread around a building [Near Usk, Monmouthshire. 23 October 2006. Adult. EMM144:163-176]

Woodland [Bedgebury Forest, VC16. 27 October 1990. Adult. HN8:10]

In garden [Angarrack, Cornwall. 1989-2005. CornwallHets]

Sandhills, under *Ononis* [Ballyteige, Co Wexford. August 1931. Adult and nymph. IrelandHets]

On *Eryngium* [Barmouth. Saunders1892]

Woodland [Battle Great Wood, VC14. Adult. HN8:10]

Feeding at *Aquilegia* fruits in garden [Bodmin, Cornwall. 1997. CornwallHets]

On or under rest-harrow (Ononis repens) [Bosherston, Pembrokeshire. 1990. BJENH4:43]

Sandhills [Braunton Burrows. September. D&S1865]

On sand dunes. In culture, bred to maturity on storksbill (*Erodium cicutarium*) [Braunton Burrows, North Devon. August 1959. Nymphs. EMM96:103]

Woodland [Brede High Wood, VC14. Adults. HN8:10]

Restharrow (Ononis repens) [Britain. July/August. Adults. EMM144:163-176]

On inflorescence of *Achillea* [Britain. Adult. EMM144:163-176]

On inflorescence of Aster [Britain. Adult. EMM144:163-176]

On inflorescence of Cirsium [Britain. Adult. EMM144:163-176]

On inflorescence of *Sonchus* [Britain. Adult. EMM144:163-176]

On sandy coasts [British Isles. S&L1959]

On Ononis [Caister Marrams. Saunders 1892]

On sandhills, running on the ground amongst *Erodium* [Carmarthenshire. Butler1923]

On *Ononis* in old pastures 20 miles from the sea [Chagford, Devon. Each year from 1936 to 1942. EMM81:278-279]

On thistles and restharrow [Charmouth, Teignmouth, Dawlish Warren and Ravenglass. 20 May to 1 July. D&S1865]

Breeding colonies in association with *Erodium* on sandhills [Coast of Devon and Cornwall. July 1957. EMM94:24]

On sand dunes, occurring wherever *Erodium* was to be found [Constantine Bay, Penhale, Daymer & Rock, Cornwall. June 1956. EMM92:372-374]

On thistles and restharrow [Devon. Butler1923]

On seeding heads of Red Clover (*Trifolium pratense*) [Dorset. August 2004. Adults. EMM144:163-176]

On infloresences of *Daucus carota* [Dorset. August 2005. Adults. EMM144:163-176]

On infloresences of *Daucus carota* [Dorset. June 1999. Adults. EMM144:163-176]

On a seedhead of Creeping Thistle (*Cirsium arvense*) in a small clearing in humid scrub [Duck End NR, Maulden, VC30. 2006. Female. HN9:14]

Cirsium in glade in scrub [Duck End NR, Maulden, VC30. August 2006. Adult. HN8:10]

On the developing seeds of a cultivated subshrub (*Caryopteris* x *clandonensis*) [Evesham, Worcestershire. October 2006. Adult. EMM144:163-176]

On *Ononis* [Ferryside, Carmarthenshire. Including a nymph. EMM48:108-111]

On a grass bank [Freshwater West, Pembrokeshire. EMM88:22]

On cypress [Gloucestershire. 2009. HN16:12]

On *Ononis* on coast sands [Great Yarmouth. Butler1923]

Associated with storksbill on sand dunes [Harlech, Merionethshire, 1949, EMM96:103]

On sand dunes. Adults under Ononis. Adults and nymphs under Erodium [Harlech,

Merionethshire. August/September 1946. Adults and nymphs. EMM83:95]

Sand-dunes on restharrow [Lelant, Cornwall. CornwallHets]

On rosemary in garden [Lethlean Towans, Phillack, Cornwall. CornwallHets]

Sweeping mixed vegetation at the edge of a field by a disused railway embankment [Near Chipping Norton, Oxfordshire. 2013. Adults including one teneral. EMM150:63-64]

Beating Cut-leaves Cranesbill (*Geranium dissectum*) at the edge of a field by a disused railway embankment [Near Chipping Norton, Oxfordshire. 2013. Nymphs. EMM150:63-64]

Beating a *Tsuga* tree [Near Marcham, VC22. HN8:13]

Feeding on the developing achenes of Sow Thistle (*Sonchus oleraceus*) [Near Usk, Monmouthshire. October 2006. Adult. EMM144:163-176]

In a garden [Norwich. EMM38:80]

Under Erodium and Ononis [Oxwich Bay, near Swansea. July/August 1925. EMM62:38-39]

From dunes [Pembrey, Carmarthenshire. August 1991. HSGN11:8]

On inflorescence of *Leucanthemum* [Pembrokeshire. 1993. Adult. EMM144:163-176]

Sand dunes [Pembrokeshire. BJENH9:3-5]

Under Erodium and Ononis on sandhills [Pembrokeshire. Ent60:283-284]

Under *Ononis* on sands/burrows [Pendine Sands, South Wales. EMM88:22]

Under *Erodium* and on the flowers of *Senecio* [Pendine, Carmarthenshire. September 1907. EMM48:108-111]

Cirsium head [Petersfield country park, VC11. Adult. HN8:10]

In coniferous woodland [Puddletown Forest, Dorset. Autumn 2001. EMM144:163-176]

Where *Erodium* was growing in a quarry [Rock, Cornwall. June 1956. EMM92:372-374]

On conifers [Salisbury, Wiltshire. 2016. BJENH31:38-39]

Centranthus [Sedlescombe garden, VC14. September 2006. Adult. HN8:10]

From dry sites using a towed suction sampler (DragVac) [Southern England. 2012. BJENH26:217-218]

Sweeping [South-west England. Synopsis1875]

Leucanthemum on cliff-top [St David's, VC45. HN8:10]

Sand-dunes on restharrow [St Ives, Cornwall. CornwallHets]

Inside a rolled leaf of Sallow (Salix) [Talacre, Flintshire. 2001. Adult. EMM144:163-176]

Sand dunes [Wales. HN9:4]

In sand dunes [Whiteford Burrows, Gower coast, South Wales. 1960/1961. Ent100:157-165]

On *Erodium* and *Ononis* in a sandy spot on the coast, running and flying actively in the hot sun [Whitsand Bay, Cornwall. 1875. EMM12:108-109]

## Liorhyssus hyalinus (Fabricius) (Rhopalidae)

Sweeping fore-dunes [Murlough NNR, Co Down. 20 May 1992. BJENH6:77]

Sweeping in a wood [Kenmare Demesne, Killarney, North Kerry. 29 May 1923. IrelandHets]

Sweeping [Margam Moors, Glamorgan. 31 May 2002. BJENH24:227-234]

In a hay meadow [Runnymede, Surrey. 26 May 2009. BJENH24:227-234]

Sweeping a sorrel patch in dune grassland [Morfa Dyffryn, Merionethshire. 5 June 2009. Adults. BJENH24:227-234]

Sweeping creeping willow in a dune blow-out [Morfa Harlech, Gwynedd. 6 June 2009. BJENH24:227-234]

Sweeping mixed tall ruderal vegetation [Yaxley, Cambridgeshire. 8 June 2009. BJENH24:227-234]

Sweeping a small remnant of grassland in the centre of a *Phragmites* reed-bed [Cokeham Brooks, Sompting, West Sussex. 11 June 2009. BJENH24:227-234]

Sweeping heathland vegetation [Ashdown Forest, East Sussex. 17 June 2004. BJENH24:227-234]

Sweeping rank grassland [Landwyn Island, Anglesey. 16 June 2009. Male and female. BJENH24:227-234]

Coastal heath [St David's Head, Pembrokeshire. 16 June 1994. BJENH8:207]

Arable field margin [Blickling Hall Estate, Norfolk. 22 June 1998. BJENH24:227-234]

Sweeping a grassy bank close to the sea shore [Portmarnock, Co Dublin. 27 June 1903. IrelandHets]

Swept from a marsh [Hewitt, 2000] [Head of Ennerdale Water, Cumbria. 1 July 2000. BJENH24:227-234]

Sweeping flowers of *Sonchus asper* on waste ground with ruderal vegetation [Slyfield, Guildford, Surrey. 2 July 2000. Adults. BJENH24:227-234]

Sweeping a rough, uncut lawn in a garden [Blackheath, West Kent. 8 July 1968. EMM104:207]

Sweeping ruderal grassland [Newhaven, East Sussex. 8 July 2003. BJENH17:180-181]

Sweeping [Witley Common, Surrey. 10 July 2011. Hem6:244]

Beneath *Erodium* [Gwithian Towans, Cornwall. 15 July 2009. Adults and nymphs. BJENH24:227-234]

On and around *Erodium* in short open-structured vegetation [March, Cambridgeshire. 11 July 2009. Adults and nymphs. BJENH24:227-234]

Underneath *Erodium* in rabbit scrapes on perched dune [Porth Ceiriad SSSI, Caernarvonshire. 14 July 1999. Adults and nymphs. BJENH24:227-234]

Sweeping flowery grassland [Rotherfield Millennium Green, East Sussex. 15 July 2000. BJENH15:180]

Sweeping in an unimproved meadow [St Dunstan's Farm, Heathfield, East Sussex. 15 July 2004. BJENH24:227-234]

Sweeping varied low vegetation in a disused chalk pit [Worlington Chalk Pit, West Suffolk. 15 July 2002. BJENH24:227-234]

Sweeping and suction sampling sparse straggling weeds amid bare sandy ground [Battersea Park, Surrey. 28 July 2003. BJENH17:137-141]

Under Erodium cicutarium [Dungeness, Kent. 26 July 2009. BJENH24:227-234]

Under *Erodium* in disturbed, horse-grazed coastal sandy field [Freshwater West, Pembrokeshire. 28 July 1985. Adults. BJENH24:227-234]

Sweeping flowers of *Pieris echioides* in ruderal vegetation on soil mound [Yaxley, Cambridgeshire. 31 July 2009. Adults. BJENH24:227-234]

In a disused quarry [Stowe, Buckinghamshire. 1 August 2006. BJENH24:227-234]

Under *Erodium* at a sand extraction pit [Upton Towans, Cornwall. 2 August 2006. Adults. BJENH24:227-234]

Sweeping tall sedges in a base-rich fen [Cors Goch NNR, Anglesey. 6 August 2003. BJENH24:227-234]

From a recently constructed scrape [Leasowe Common, Wirral, Cheshire. 9 August 2005. BJENH24:227-234]

Sweeping an excavation site, amid farmland beside a road, where a pipeline had been buried [B4009 road between Goring and South Stoke, VC23. 14 August 2006. HN15:11]

In a sandy field that had been ploughed in the spring [Gozzard's Ford, west of Abingdon, VC22. 18 August 2009. Males. HN15:11]

Sweeping a flowery patch [Amesbury Down, Wiltshire. 21 August 2003. BJENH24:227-234]

On *Erodium* on dry sandy brownfield ground with variable substrate and vegetation [Cople Tip, Bedfordshire. 25 August 2000. Adults. BJENH24:227-234]

In sandy bare ground [Nursling Substation, Hampshire. 24 August 2009. BJENH24:227-234]

Under Erodium on bare sand [Whiteford Burrows, Gower. 22 August 2009. BJENH24:227-234]

Under *Erodium cicutarium*. In culture, the nymphs fed on *Geranium* spp. [Braunton Burrows, North Devon. 29 August 1958. Adults and nymphs. EMM95:14]

On mixed seed crop [Near Ardley, Hertfordshire. 5 September 2003. Male. BJENH24:227-234]

Under Erodium on coastal dunes [Daymer Bay, Cornwall. 9 September 1985. BJENH24:227-234]

Under *Erodium* in trampled dune area [Freshwater East, Pembrokeshire. 8 September 2003. Adults and nymphs. BJENH24:227-234]

Under *Erodium* [Gupton Burrows, Pembrokeshire. 10 September 2003. Adults and nymphs. BJENH24:227-234]

Under *Erodium* [Stackpole Warren, Pembrokeshire. 10 September 2003. Adults and nymphs. BJENH24:227-234]

Beating tallish vegetation in a garden [Blackheath, Kent. 14 September 1958. Adult. EMM94:287] On stork's-bill (*Erodium cicutarium*) in a disused sand quarry [Sandy Heath, Bedfordshire. 15 September 1996. Adults and nymphs. BJENH10:177-178]

Sweeping [Thames Barrier Park East, South Essex. 13 September 2006. BJENH20:55]

From a bog [Millyford Green, New Forest. 18 September 2003. BJENH24:227-234]

From a marshy place [Near Gosfield, Essex. 24 September 1903. BJENH24:227-234]

To MV light [Horton, Gower, VC41. 4 October 2013. Adult. HN21:5]

On a cemetery wall [Norwich. 3 October 1903. EMM40:16]

In moss [Aldbury Nowers NR, VC20. September. HN8:12]

Sweeping plants in a wood [Halbert, 1935] [County Kerry. 1923. BJENH24:227-234]

From a brownfield site [Near Goring, VC23. 2006. ERJV125:74-76]

In a marshy place [Near Gosfield, Essex. Males. EMM39:294]

Coastal cliffs [Wales. HN9:4]

Under Stork's-bill (*Erodium cicutarium*) [Wales coast and Suffolk Brecks. Adults and nymphs. HN14:4]

Myrmus miriformis (Fallén) (Rhopalidae)

Seen sucking grass in culture [Burnham Beeches. 22 June 1912. Nymph. Butler1923]

Sweeping short grass [Aberystwyth, Cardiganshire. 17 July 1955. Female. EMM92:54-64]

On a grassy hillside with scattered trees [Near Guildford, Surrey. 23 July 1957. Macropters. Ent92:6-13]

On Melampyrum [Ruislip Woods, Middlesex. 7 August 1935. Male. Ent71:148-153]

In dry meadow [Aberystwyth, Cardiganshire. 13 August 1955. EMM92:54-64]

Sweeping [Boxhill, Surrey. 12 August 1906. LondonHets]

Sweeping [Wisley Common, Surrey. 11 August 1899. LondonHets]

Dry, stony valley bottom with short grass [Ystwyth valley, Cardiganshire. 14 August 1954. EMM92:54-64]

In long grass [Harefield, Middlesex. 16 August 1933. Female. Ent71:148-153]

Sweeping [Imperial College Biological Field Station, Slough. 22 August 1933. TSBE2:47-67]

Sweeping overgrown former wharfs [River Medway, Rochester. 1 September 2004. BJENH18:209]

Sweeping rough grassland [Hartlebury Common LNR, Worcestershire. 6 September 1988. Male green form. EMM133:17-26]

From rushes [Burnt Wood, Lincolnshire. 13 September 1897. Butler1923]

Sweeping *Calluna*. In culture, laid eggs on the leaves and flowers of a twig of *Calluna*. Eggs kept over winter and hatched in May [Gomshall, Surrey. 19 September 1910. Female. EMM48:36-38]

On grass [Richmond Park, Surrey. 19 September 1953. LondonHets]

On grass [Mitcham Common, Surrey. 26 September 1983. LondonHets]

Off bracken [Anglesey. September 1923. Including male and female. EMM60:37-39]

In grass [Arthog, Merioneth. August/September 1927. EMM64:62-64]

From an abandoned metalliferous mine site [Binner Downs, near Leedstown, West Cornwall. 1994-2007. BJENH21:205-214]

Sweeping *Psamma* on sandhills [Camber sandhills. EMM21:19-20]

Sweeping [Chobham Common. July 1892. Developed and undeveloped, of all shades of colour from brown to apple-green. EMM28:290]

Among long grass [Culver, Isle of Wight. EMM60:117-118]

Vacuum sampling on chalk grassland [Dorset. Stage unknown. HN2:7]

Sweeping [Epping Forest, Essex. Nymphs. LondonHets]

On heath grasses [Foxhall and Tuddenham Fen. SuffolkHets]

Sweeping rank grass [Hampstead Heath. Macropters and brachypters. PTSLENHS1949-50:36-38]

On grassy areas [Hounslow Heath, Middlesex. 1952. Ent86:34-40]

On hills [Near Shere, Surrey. August 1892. Developed forms mating with brachypters, as well as like with like. Butler1923]

From naturally vegetated derelict land [North-west England. 1987-1988. EG43:221-226]

On lupin [Scrubs Wood, Hammersmith, Middlesex. 1984. LondonHets]

Seen feeding on the leaves and unripe seeds of grasses [Sunninghill, near Ascot, Berkshire. TRESL103:171-218]

On hare's foot trefoil (*Trifolium arvense*) in a sand-pit [Taplow, Buckinghamshire. July 1952. EMM88:255]

Sweeping grass [Weybridge, Surrey. July. LondonHets]

Rhopalus maculatus (Fieber) (Rhopalidae)

On wet heath [Thursley NNR, Surrey. 29 April 1990. EMM133:79-80]

In area dominated by *Molinia* [Hook Common, VC12. 3 June 2002. Adults. HN3:5]

Sweeping wet heathland with Cottonsedge (*Eriophorum*) [Wildmoor Heath NR, Crowthorne, Berkshire. 7 June 2008. Hem1:36]

Sweeping. In culture, seen feeding on the green seed pods of *Hypericum pulchrum* [Near Woodfidley, New Forest. 23 July 1950. Nymphs. EMM87:172-173]

Sweeping the edges of a wide woodland ride [Hawkhill Inclosure, near Brockenhurst, New Forest. 16 August 2010. Hem1:26]

Sweeping wet heathland with Cottonsedge (*Eriophorum*) [Wildmoor Heath NR, Crowthorne, Berkshire. 23 August 2008. Hem1:36]

Sweeping and at the roots of mats of common tormentil (*Potentilla erecta*) growing in grassy areas of heathy ground [Fleet Pond, Hampshire. 10 September 1959. Adults and nymphs. EMM95:287-288]

Sweeping wet heathland with Cottonsedge (*Eriophorum*) [Wildmoor Heath NR, Crowthorne, Berkshire. 13 September 2008. Hem1:36]

Beating birch [West Byfleet. 21 September 1940. Ent74:240]

Sweeping wet heathland [Conford Fen, North Hampshire. 30 September 1994. EMM133:79-80]

On marsh cinquefoil (*Potentilla palustris*) [Woolmer Pond, Hampshire. 28 September 1954. Adults and nymphs. EMM95:287-288]

Sweeping [Bookham Common, Surrey. 14 November. Adults. LondonHets]

Sweeping Myrica, etc [Boldre, Hampshire. HantsHets]

Inland marshy or damp, lush places [Britain. S&L1959]

*Myrica Gale* [Chobham. 1876. EMM13:113-114]

Sweeping a damp place [Chobham. August/September. EMM19:140]

On marsh cinquefoil (*Potentilla palustris*) in a damp place [Esher Common, Surrey. July 1964. Adult. LondonHets]

Sweeping [Ewhurst. Saunders1892]

On Skullcap (Scutellaria) [Matley Bog, Hampshire. HantsHets]

At the roots of great tufts of luxuriant grass (*Poa nemoralis*) [Matley Bog, New Forest. August. Butler1923]

Sweeping [Near Ewhurst, Surrey. August 1889. Nymph, reared in culture. EMM25:401-402] Wetland [Wales. HN9:5]

Flying and running in sunshine over *Juncus* and Bramble bushes in a small marshy spot [West Byfleet. June 1941. Ent74:240]

#### Rhopalus parumpunctatus Schilling (Rhopalidae)

Flying and alighting on mixed low vegetation on a dry sandy roadside. In culture, laid eggs and hatched nymphs seen feeding on the inflorescences of *Dactylis glomerata* and sepals of *Geranium* and *Erodium* [Between Barton Mills and Icklington, Suffolk. 21 May 1952. Female. PRESL(A)29:32-38]

Sweeping along a woodland ride [Between Santon Warren and Two Mile Bottom, West Norfolk. 20 June 2019. Hem6:248]

Sweeping short, mixed vegetation dominated by sorrel and heather/heath [Cavenham Heath, West Suffolk. 20 June 2019. Hem6:248]

Sweeping along a woodland ride [Two Mile Bottom, West Norfolk. 17 June 2019. Hem6:247]

Sweeping a track through woodland and clearing [Near Two Mile Bottom, West Norfolk. 21 June 2019. Hem6:248]

Associated with *Trifolium arvense* in a disused sand pit [Taplow, Buckinghamshire. 23 July 1952. LondonHets]

Sweeping a brownfield site [Millbrook. 31 July 2015. BJENH29:69-88]

Sweeping a brownfield site [Stewartby Pit. 4 August 2015. BJENH29:69-88]

Under Erodium [Worlington and Freckenham, Suffolk. 5 August 1934. EMM71:113-114]

Sweeping low herbage in a sparsely-vegetated sandy and gravelly area [Amwell NR, VC20. 15 August 2015. Hem3:56]

On Spergularia [Poole, Dorset. 15 August 1942. Nymphs. EMM81:278-279]

Sweeping [Witley Common, Surrey. 19 August 2012. Hem6:244]

On heath (*Erica*) [Horsell, Surrey. 28 August 1949. LondonHets]

In a sand-pit, nymphs on *Spergularia* and adults beneath tufts of coarse grasses [Titchfield, Hampshire. 28 August 1945. Adults and nymphs. EMM81:278-279]

On a weedy setaside field [Sandy Heath, VC30. 1 September 2007. HN11:15]

Sweeping [Wisley, Surrey. 2 September 1906. LondonHets]

Sweeping a brownfield site [Millbrook. 30 September 2015. BJENH29:69-88]

Sweeping a brownfield site [Padworth Recycling Centre. 28 September 2012. BJENH29:69-88]

From a wood [Gibraltar Point, VC54. 11 October 2015. Hem3:84]

Sweeping in dry places [Bournemouth. Saunders1892]

Sweeping Psamma arenaria [Bournemouth. September 1871. EMM8:136-137]

Sweeping [Brandon, Suffolk. August. SuffolkHets]

At roots of *Echium vulgare* [Brandon, Suffolk. September. SuffolkHets]

Dry sandy areas, margins of sandy or cindery tracks, evolved dunes, and grassy areas on heaths [Britain. S&L1959]

From a landfill site [Cople, VC30. 2002. HN11:15]

Sweeping the flowers of *Pimpisella saxifraga* on sand-hills [Deal. September 1872. EMM9:192-193]

Under Erodium on sandhills [Kidwelly and Pendine, Carmarthenshire. EMM48:108-111]

Sweeping at a roadside [Near Bournemouth. Synopsis1875]

From an uncultivated field with patches of bare sandy ground and varied flora [Near Sandy, Bedfordshire. May 2005. HN5:7]

Under Erodium and Ononis [Oxwich Bay, near Swansea. July/August 1925. EMM62:38-39]

From dunes [Pembrey, Carmarthenshire. August 1991. HSGN11:8]

Adults sitting on the flower-heads of *Spergularia* growing in a sand-pit. Readily took wing. Nymphs under the plants [Rempstone sand-pits, near Studland, Dorset. July 1942. Adults and nymphs. EMM81:278-279]

Sweeping [Rotherfield Peppard, Henley-on-Thames. 1902. EMM39:17-18]

On Senecio jacobea [Shooter's Hill, Blackheath, Kent. 1898. LondonHets]

On sand spurrey (*Spergularia rubra*) [Shortheath, North Hampshire. August 1996. Nymphs reared in culture. EMM133:175-176]

On and under *Cerastium vulgatum* on cinder-covered waste land [Slough, Buckinghamshire. 1953/1954. Adults and nymphs. Ent88:10-17]

On hare's foot trefoil (*Trifolium arvense*) in a sand-pit [Taplow, Buckinghamshire. July 1952. EMM88:2551

On a patch of dodder (*Cuscuta epithymum*) [Thursley NNR, Surrey. Adults. EMM133:79-80] At *Spiraea* flowers [Tuddenham Fen, Suffolk. August. SuffolkHets]

Under leaves of herbaceous plants [Weybridge, Surrey. September. LondonHets]

In sand dunes [Whiteford Burrows, Gower coast, South Wales. 1960/1961. Ent100:157-165]

Under Cerastium and on Erodium [Witley Common, Surrey. 1957/1958. Ent92:6-13]

On a range of plants, including *Erodium* and *Hypericum* [Woolmer Forest, North Hampshire. 1994. EMM133:79-80]

On storksbill [Woolmer Forest, North Hampshire. 1994. Nymphs. EMM133:79-80]

# Rhopalus rufus Schilling (Rhopalidae)

Sweeping [Horsell Common, near Woking, Surrey. 27 August 2006. BJENH20:192]

Searching beneath Calluna vulgaris and Erica cinerea [Cadnam, New Forest. EMM87:288]

Under corn spurrey (Spergularia arvensis) [Dorset. HSGN12:8]

Under heather (*Calluna vulgaris* and *Erica cinerea*) growing on a dry, sandy bank [Near Cadnam, New Forest. PTSLENHS1951-52:17-18]

Under Erodium and Ononis [Oxwich Bay, near Swansea. July/August 1925. EMM62:38-39]

On sand spurrey (*Spergularia rubra*) [Shortheath, North Hampshire. August 1996. Nymphs reared in culture. EMM133:175-176]

On heaths [Surrey. S&L1959]

Sweeping and on open sandy ground [Woolmer Forest, North Hampshire. 1994. EMM133:79-80]

From corn spurrey (*Spergularia arvensis*) [Woolmer Forest, North Hampshire. 1996. Nymphs reared in culture. EMM133:175-176]

Rhopalus subrufus (Gmelin) (Rhopalidae)

Amongst roots of plants [Wrotham, Kent. 22 April 1947. LondonHets]

Sweeping *Hypericum perforatum* [South Wiltshire. 8 May 1948. Males and a female. EMM86:26-28]

On Geum [Forty-foot Lane, Souldrop, Bedfordshire. 18 May 1947. EMM86:6-8]

Sweeping low plants [Woolwich Common, West Kent. 19 May 1999. ERJV111:204]

In a garden [Maidenhead, Berkshire. 31 May 1979. EMM114:159]

On vegetation at margins of beechwoods [Booker, near High Wycombe, Buckinghamshire. 3 June 1951. EMM87:236]

Sweeping grassy mound and rubbish dump overgrown with weeds [Grounds of the Pest Infestation Laboratory, Slough. 2 June 1951. EMM87:236]

Sweeping a woodland ride [Pentimore Wood, Northamptonshire. 2 June 2014. Hem2:26]

Sweeping along a dismantled railway line [Helmdon, Northamptonshire. 6 June 2014. Hem2:26]

On Teucrium scorodonia [Whitbarrow, near Grange-over-Sands. 14 June 1954. TSBE15:117-134]

Sweeping along a dismantled railway line [Helmdon, Northamptonshire. 19 June 2014. Hem2:26]

In garden [Bodmin, Cornwall. 14 July 2004. CornwallHets]

On Teucrium botrys [Chipstead Valley, Surrey. 16 July 1952. LondonHets]

Sweeping and suction sampling sparse straggling weeds amid bare sandy ground [Battersea Park, Surrey. 28 July 2003. BJENH17:137-141]

Beating Round-leaved Cranesbill (Geranium rotundifolium) growing along a field edge

[Berinsfield, Oxfordshire. 27 July 2013. Adults and nymphs reared in culture. EMM150:63-64]

Shaking Round-leaved Cranesbill (*Geranium rotundifolium*) growing at the edge of the runway of a disused airfield [Bradwell Grove, Oxfordshire. 29 July 2013. Adults and nymphs reared in culture. EMM150:63-64]

From a brownfield site [Colchester, Essex. 31 July 2005. HN6:8]

Sweeping Hypericum perforatum [Darenth Wood, Kent. 21 August 1904. LondonHets]

From downs [Singleton, Sussex. 28 August 1945. EMM82:199-200]

From birch [Grounds of the Pest Infestation Laboratory, Slough. 4 September 1950. EMM87:201]

Sweeping a bank. Reared to adult on *Dactylis* [Great Gaddesden, Hertfordshire. 9 September 1944. Nymphs. EMM81:163-164]

On oak [King's Wood, Bedfordshire. 9 September 1944. EMM86:6-8]

Sweeping heather [Hartlebury Common LNR, Worcestershire. 24 September 1993. EMM133:17-26]

On Betula [Grounds of Pest Infestation Laboratory, Slough. 4 October 1950. LondonHets]

Sweeping [Addington, Surrey. 6 October 1962. PTSLENHS1962:104]

In dead curled leaf of *Stachys sylvatica* in hedge [Near Deadmansea Wood, Bedfordshire. 8 November 1945, EMM86:6-8]

Sweeping [Allerford, Somerset. August 1928. EMM65:40-42]

From common St John's wort [Britain. S&L1959]

Sweeping *Hypericum* [Darenth. Ent37:292]

Sweeping in a lane and in a wood [In and around Newton Abbot, South Devon. August 1937. EMM74:20-21]

Sweeping [Mickleham, Surrey. September. LondonHets]

Beating Cut-leaves Cranesbill (*Geranium dissectum*) at the edge of a field by a disused railway embankment [Near Chipping Norton, Oxfordshire. 2013. Adults. EMM150:63-64]

Sweeping [Near Ewhurst, Surrey. August 1889. EMM25:401-402]

From a hedge [Near Faversham, Kent. 1903. EMM40:100-103]

From a brownfield site [Near Goring, VC23. 2006. ERJV125:74-76]

Sweeping [North Kent. August 1897. EMM33:236]

Sweeping Hyperieum purfoliatum [Nunton and Groveley Wood. Saunders 1892]

From post-industrial sites [Upper Don Valley, VC63. HN13:11]

Under Geranium and Erodium [Witley Common, Surrey. 1957/1958. Ent92:6-13]

Sweeping patches of *Hypericum* [Woolmer Forest, North Hampshire. 1994. EMM133:79-80]

Stictopleurus abutilon (Rossi) (Rhopalidae)

From wasteground [Oxford, VC23. 8 May 2007. ERJV125:74-76]

From grassland and short scrub [Near Dartford Tunnel, Kent. 22 May 2005. HN6:8]

Sweeping along a woodland ride [Between Santon Warren and Two Mile Bottom, West Norfolk. 20 June 2019. Hem6:248]

Sweeping short, mixed vegetation dominated by sorrel and heather/heath [Cavenham Heath, West Suffolk. 20 June 2019. Hem6:248]

Sweeping disturbed, sandy ground with sorrel and heather/heath [Near the level crossing north of Santon Downham, West Norfolk. 16 June 2019. Hem6:246]

In rough ruderal grassland [VC16. 20 June 2007. HN11:12]

Sweeping a track through woodland and clearing [Near Two Mile Bottom, West Norfolk. 21 June 2019. Hem6:248]

In tall grassland [Cuxton Pit, VC16. 30 June 2005. Male. HN6:9]

In tall grassland [Cuxton Pit, VC16. 30 June 2006. Male. HN11:12]

In a wood [Finemere Wood, VC24. 24 July 2006. ERJV125:74-76]

Sweeping and suction sampling sparse straggling weeds amid bare sandy ground [Battersea Park, Surrey. 28 July 2003. BJENH17:137-141]

From a brownfield site [Colchester, Essex. 31 July 2005. HN6:8]

Sweeping a brownfield site [Stewartby Pit. 4 August 2015. BJENH29:69-88]

Sweeping [RHS Garden, Hyde Hall, near Rettenden, Essex. 7 August 2006. BJENH20:192]

Sweeping an excavation site, amid farmland beside a road, where a pipeline had been buried [B4009 road between Goring and South Stoke, VC23. 14 August 2006. HN15:11]

MV light [Essex Filter Beds, Essex. 14 August 1996. ERJV116:118-190]

Sweeping mixed herbage growing in sandy area [Shortheath Common, North Hampshire. 15 August 1996. BJENH10:177]

Sweeping low vegetation [Old Winchester Hill, VC 11. 26 August 2005. HN6:14]

Sweeping hayfield meadow [Down House, Downe, West Kent. 4 September 2003. BJENH17:181-182]

Sweeping a brownfield site [Hackney Marsh. 4 September 2014. BJENH29:69-88]

Sweeping dry grassland on a brownfield site [The Moors, Colchester, Essex. 2 September 2005. HN6:8]

In weedy, waste ground with some bare earth [Near Waterford, Hertfordshire. 9 September 2003. HN4:7]

On a small patch of heathland [Siston Common, Bath, VC6. 7 September 2004. HN6:8]

On flower head [Ashtead, Surrey. 13 September 1948. Female. EG29:261-264]

On Shepherd's Purse (*Capsella bursa-pastoris*) [Drakes Broughton, Worcestershire. 23 September 2006. EMM143:89]

Feeding on the developing achenes of Fleabane (*Pulicaria dysenterica*) [Drakes Broughton, Worcestershire. 24 September 2006. Nymphs reared in culture. EMM143:89]

Sweeping scattered vegetation growing from the joints in the concrete sections of a disused airfield [Worminghall, Buckinghamshire. 24 September 2018. Hem6:221]

In a derelict field [Hitchcopse Pit, near Dry Sandford, VC22. 28 September 2011. ERJV125:74-76]

Sweeping a brownfield site [Marston Vale. 30 September 2015. BJENH29:69-88]

Sweeping rough railway embankment [West Acton, Middlesex. 5 October 1999. BJENH14:168]

From fleabane [Dry Street, Basildon, South Essex. 13 October 2003. Adults. BJENH17:181-182]

Sunning on a house wall [Evesham, Worcestershire. 24 October 2006. EMM143:89]

Sweeping flowery derelict land [Gallions Reach, Beckton. 1 November 2004. BJENH18:209]

On soft cliffs [Between Filey and Flamborough, VC61. September 2006. HN9:15]

Sweeping *Psamma arenaria* [Bournemouth. September 1871. EMM8:136-137]

Sweeping mixed herbage on the coast [Deal, Kent. July 1870. Female. EMM7:208]

Dry, well-drained, sparsely vegetated brownfield sites [In and around urban London. BJENH20:193-194]

From a brownfield site [Mast Pond Wharf, Woolwich. BJENH16:109-121]

From a brownfield site [Near Goring, VC23. 2006. ERJV125:74-76]

Sweeping rough hawkbit (*Leontodon hispidus*) [Near Oakhanger, North Hampshire. 1996. Adults and nymphs. EMM133:175-176]

Along field edges [Near Oxford, VC23. 2006. ERJV125:74-76]

On brownfield sites [SE England. BJENH16:109-121]

Stictopleurus punctatonervosus (Goeze) (Rhopalidae)

In derelict overgrown railway sidings, car parks and wharfs [Rochester. 26 April 2004. BJENH18:209]

Sweeping a brownfield site [Padworth Recycling Centre. 13 May 2015. BJENH29:69-88]

Sweeping a brownfield site [Padworth Recycling Centre. 22 May 2013. BJENH29:69-88]

On *Oenanthe* [Botley Wood, Hampshire. 4 June 2004. Nymph. BJENH18:208]

In derelict overgrown railway sidings, car parks and wharfs [Rochester. 15 June 2004. BJENH18:209]

Sweeping short, mown, mixed vegetation in the grounds of a hotel [Barton Mills Travelodge, West Suffolk. 16 June 2019. Hem6:246]

Sweeping along a woodland ride [Between Santon Warren and Two Mile Bottom, West Norfolk. 20 June 2019. Hem6:248]

Sweeping overgrown car park and wharfs [Chelsea Harbour. 18 June 2004. BJENH18:209]

Sweeping a brownfield site [Darenth. 18 June 2014. BJENH29:69-88]

Sweeping and searching at the roots of plants on a sandy field corner [Icklingham Plains, West Suffolk. 18 June 2019. Hem6:247]

Sweeping unimproved grassland [Mayfield, East Sussex. 9 July 2001. BJENH15:180]

Sweeping brownfield site [Sue Godfrey Nature Park, Deptford. 9 July 2003. Adult and nymphs. BJENH17:181-182]

Sweeping derelict farm building site [Woodlands Farm, Bexley, VC16. 7 July 1998. ERJV112:267-268]

Sweeping overgrown car park and wharfs [Chelsea Harbour. 19 July 2004. BJENH18:209]

Vacuum-sampling dry, sparsely-vegetated ground near a river [The Moors, Colchester, VC19. 17 July 1997. ERJV111:135-136]

In a wood [Whitecross Green Wood, VC24. 19 July 2006. ERJV125:74-76]

From a brownfield site [Colchester, Essex. 31 July 2005. HN6:8]

In a wood [Bernwood Forest, VC24. 1 August 2006. ERJV125:74-76]

Sweeping a flowery area of rough grassland on a river embankment [River Thames, next to Chelsea Power Station, VC21. 8 August 2000. ERJV112:267-268]

Sweeping an excavation site, amid farmland beside a road, where a pipeline had been buried [B4009 road between Goring and South Stoke, VC23. 14 August 2006. HN15:11]

From grassland and scrub with bare ground, formerly a railway sidings [Beeston Sidings LNR, Nottinghamshire. 14 August 2005. HN6:8]

Sweeping long grass [Wandsworth Common, London. 13 August 2006. BJENH20:213-216]

Sweeping derelict farm building site [Woodlands Farm, Bexley, VC16. 20 August 1998. ERJV112:267-268]

Sweeping on former arable land [Near Thorne Moor, VC63. 27 August 2010. HN19/20:12]

Sweeping a brownfield site [Darenth. 5 September 2014. BJENH29:69-88]

Sweeping mugwort growing on sand and brick rubble [Deptford. 5 September 2003. BJENH17:181-182]

In derelict overgrown railway sidings, car parks and wharfs [Rochester. 1 September 2004. BJENH18:209]

From brownfield site [Sue Godfrey Nature Park, Deptford. 5 September 2003. Adult. BJENH17:181-182]

Sweeping dry grassland on a brownfield site [The Moors, Colchester, Essex. 2 September 2005. HN6:8]

In weedy, waste ground with some bare earth [Near Waterford, Hertfordshire. 9 September 2003. HN4:7]

From rough grassland public open space [Grays, VC18. 11 September 2003. ERJV116:118-190] In abandoned paddocks dominated by Fleabane [Burridge, VC11. 20 September 2003. HN3:5]

From vegetation growing in a sandy area of a filled-in quarry [Near Cothill, VC22. 17 September 2018. Nymphs reared in culture. Hem6:221]

Sweeping a neglected margin of an arable field by a road [Near North Stoke, VC23. 17 September 2018. Hem6:219]

Sweeping a brownfield site [Stewartby Pit. 17 September 2015. BJENH29:69-88]

Sweeping open herbaceous vegetation [Dering Wood, VC15. 21 September 2003. ERJV116:118-190]

Feeding on the achenes of sowthistle (*Sonchus arvensis*) [Drakes Broughton, Worcestershire. 24 September 2006. EMM143:89]

Sweeping open herbaceous vegetation [Headcorn, River Beult, VC15. 21 September 2003. ERJV116:118-190]

Vacuum-sampling bare, sandy ground near a river [West Bergholt Heath, West Bergholt, VC19. 23 September 1997. ERJV111:135-136]

Sweeping scattered vegetation growing from the joints in the concrete sections of a disused airfield [Worminghall, Buckinghamshire. 24 September 2018. Hem6:221]

Sweeping a rabbit-grazed meadow surrounding a quarry [Enstone, Oxfordshire. 29 September 2011. EMM149:136-137]

Sweeping meadow [Ifield, West Sussex. 29 September 2003. BJENH17:181-182]

Sweeping a brownfield site [Marston Vale. 30 September 2015. BJENH29:69-88]

From brownfield site [Millbrook. 30 September 2015. BJENH29:69-88]

Sweeping a brownfield site [Padworth Recycling Centre. 28 September 2012. BJENH29:69-88]

Sweeping the verge of a woodland ride [Swanton Novers Wood NNR, VC28. 28 September 2008. HN12:18]

Sweeping rough, grassy railway embankment [West Acton, VC21. 5 October 1999. ERJV112:267-268]

Abandoned arable [Bishop's Cleeve, Gloucestershire. 10 October 2013. HN22:8]

Sweeping trackside herbage [Near Great Rissington, Gloucestershire. 6 October 2013. HN22:8]

Sweeping [Dry Street, Basildon, South Essex. 13 October 2003. Adults and nymphs. BJENH17:181-182]

Sweeping weeds in a garden [Woodmancote, Gloucestershire. 12 October 2005. GloucsHets]

In a set-aside field [Cornard Mere, VC26. 18 October 2003. ERJV116:118-190]

Indoors [Holly Road, Stanway, VC19. 29 October 2003. ERJV116:118-190]

Sweeping flowery derelict land [Gallions Reach, Beckton. 1 November 2004. BJENH18:209]

Sweeping [Charlwood, Surrey. Autumn. Synopsis1875]

Sweeping sparsely vegetated derelict site [Chelsea Creek. August 2000. Adults and nymphs. BJENH14:168]

Post-industrial site [Colchester, Essex. 1997. BJENH12:180]

From old railway sidings with sparse, ruderal vegetation on sandy ground [Cricklewood, North London. 2002. BJENH17:15-23]

From tall, open, flower-rich, herbaceous vegetation along railway sidings [Haringey, VC21. June/July 2000. ERJV116:118-190]

Dry, well-drained, sparsely vegetated brownfield sites [In and around urban London. BJENH20:193-194]

From a brownfield site [Near Goring, VC23. 2006. ERJV125:74-76]

Along field edges [Near Oxford, VC23. 2006. ERJV125:74-76]

On brownfield sites [SE England. BJENH16:109-121]

On the seed heads of Tansy (*Tanacetum vulgare*) [St Nicholas Fields LNR, York, VC62. 2018. Adult. Hem6:237]

From post-industrial sites [Upper Don Valley and Dearne Valley, VC63. HN13:11]

Grassy bank [West Mersea, Essex. 1998. BJENH12:180]

 ${\it Stictopleurus punctatonervosus/abutilon~AMBIGUOUS~(Rhopalidae)}$ 

Sweeping in dry places [Chobham. Saunders1892]

### **Bibliography**

# Brachycarenus tigrinus (Schilling) (Rhopalidae)

as *Brachycarenus tigrinus* BJENH17:137-141, BJENH17:181-182, BJENH20:193-194, BJENH20:55, BJENH25:205-215, ERJV125:135-136, Hem1:4, Hem1:42, Hem1:43, Hem3:2, Hem4:102, Hem4:113, Hem4:116, Hem4:121, Hem4:128, Hem4:131, Hem4:69, Hem5:102, Hem5:2, Hem5:26, Hem6:247, Hem6:248, Hem6:249, Hem6:26, HN11:14, HN4:2, HN6:10

as Brachycarinus tigrinus BJENH20:191, BJENH29:69-88

as Rhophalus tigrinus EMM134:265-266

## Chorosoma schillingii (Schilling) (Rhopalidae)

- as C. schillingii EMM81:253-273
- as Chor. schillingii EMM91:7-27
- as Chorosoma EMM21:19-20
- as Chorosoma schillingi BJENH18:165-170, BJENH2:53, BJENH20:193-194, BJENH21:205-214, BJENH25:205-215, BJENH27:131-137, BJENH8:207, Butler1923, CornwallHets, EG19:8, EG20:125-135, EMM120:177, EMM124:80, EMM127:250, EMM133:261-262, EMM140:247-250, EMM147:213-221, EMM48:108-111, EMM48:36-38, EMM59:203-204, EMM60:37-39, EMM63:41-42, EMM64:64, EMM69:234-245, EMM72:258-259, EMM77:273-278, EMM91:75, ERJV112:267-268, ERJV115:229, ERJV72:261-263, ERJV97:147, ERJV97:8, HantsHets, HN10:6, HN14:12, HN16:13, HN2:8, HN9:15, HN9:4, HSGN11:9, HSGN13:1, PRESL(A)29:32-38, PRESL(A)38:15-22, PSLENHS1905-06:85, PTBENHS18:20, PTBENHS6:103, PTSLENHS1962:123-183, PTSLENHS1964:36, S&L1959, TRESL103:171-218, TSBE1:51-84
- as *Chorosoma Schillingi* D&S1865, EMM17:67-68, EMM26:81-82, EMM3:92, EMM31:282, EMM33:236, EMM36:94-101, EMM7:137-138, Saunders1892, SuffolkHets, Synopsis1875
- as *Chorosoma schillingii* BJENH25:176-177, BJENH25:205-215, Ent38:261, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem2:13, Hem3:104, Hem3:2, Hem3:40, Hem3:75, Hem3:84, Hem4:102, Hem4:131, Hem4:17, Hem4:18, Hem4:27, Hem4:3, Hem4:69, Hem4:86, Hem4:93, Hem5:102, Hem5:120, Hem5:17, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:93, Hem6:214, Hem6:216, Hem6:26, HN15:13, HN17/18:26, HN7:15, HSGN11:8, PSLENHS1900:85-86, PTSLENHS1965:91, TSBE11:245-280
- as Chorosoma Schillingii EMM7:184-185
- as Chrosoma schillingi EG20:125-135

# Corizus hyoscyami (Linnaeus) (Rhopalidae)

- as C. hyoscyami EMM81:253-273, EMM82:94-95
- as Cor. hyoscyami EMM91:7-27
- as Corizus hyocyami ERJV71:220-221
- as Corizus hyoscami HN11:14, HN8:13, HN9:13
- as Corizus hyoscamni HN11:12
- as *Corizus hyoscyami* BJENH10:1-2, BJENH10:178-179, BJENH17:180, BJENH20:191, BJENH20:192, BJENH21:184-185, BJENH24:54-55, BJENH26:217-218, BJENH29:69-88, BJENH31:245-246, BJENH31:38-39, BJENH4:119-121, BJENH4:43, BJENH4:43, BJENH4:43, BJENH9:3-5, CornwallHets, EG60:37-71, EMM143:89, EMM144:163-176, EMM147:213-221, EMM149:165-180, EMM150:63-64, EMM77:273-278, EMM81:278-279, EMM83:95, EMM87:139, EMM88:22, EMM89:212, EMM92:372-374, EMM92:54-64, EMM94:24, EMM96:103, Ent100:157-165, Ent88:33-36, ERJV124:143-145, ERJV128:152-153, Hem1:28, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem2:13, Hem2:27, Hem2:31, Hem2:58, Hem3:104, Hem3:2, Hem3:22, Hem3:23, Hem3:40, Hem3:75, Hem3:84, Hem3:93, Hem4:102, Hem4:131, Hem4:27, Hem4:3, Hem4:37, Hem4:40, Hem4:69, Hem4:86, Hem5:102, Hem5:120, Hem5:147, Hem5:149, Hem5:17, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:70, Hem5:93, Hem6:214, Hem6:215, Hem6:216, Hem6:221, Hem6:237, Hem6:238, Hem6:26, Hem6:270, HN11:16, HN13:10, HN13:9, HN14:10, HN14:8, HN15:11, HN15:13, HN16:10, HN16:12, HN16:13, HN17/18:21, HN17/18:22, HN17/18:26, HN19/20:10, HN19/20:11,

- HN21:5, HN23:10, HN23:12, HN23:5, HN6:14, HN8:10, HN8:11, HN8:13, HN9:14, HN9:15, HN9:3, HN9:4, HSGN11:8, HSGN11:9, HSGN6:3, PRESL(A)23:1-8, PTBENHS19:55, PTSLENHS1960:4-5, S&L1959
- as Therapha hyoscami HantsHets
- as *Therapha hyoscyami* Butler1923, EMM12:108-109, EMM23:106, EMM38:80, EMM44:32-34, EMM48:108-111, EMM62:38-39, EMM69:234-245, EMM7:157, Ent60:283-284, IrelandHets, PRESL(A)29:32-38, Saunders1892, Synopsis1875, TSBE1:51-84
- as Therapha Hyoscyami D&S1865

## Liorhyssus hyalinus (Fabricius) (Rhopalidae)

- as *Corizus hyalinus* Butler1923, EMM39:294, EMM39:300-301, EMM40:16, EMM43:196-202, HantsHets, IrelandHets
- as *L. hyalinus* EMM81:253-273
- as Lio. hyalinus EMM91:7-27
- as *Liorhyssus hyalinus* BJENH10:177-178, BJENH15:180, BJENH17:137-141, BJENH17:180-181, BJENH17:181-182, BJENH17:182-183, BJENH20:193-194, BJENH20:55, BJENH24:227-234, BJENH25:205-215, BJENH6:77, BJENH8:207, BJENH9:3-5, CornwallHets, EMM104:207, EMM133:175-176, EMM133:261-262, EMM77:273-278, EMM92:189-193, EMM94:287, EMM95:14, EMM95:96, ERJV125:74-76, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem2:13, Hem3:104, Hem3:2, Hem3:22, Hem3:23, Hem3:40, Hem4:102, Hem4:131, Hem4:150, Hem4:152, Hem4:27, Hem4:3, Hem4:37, Hem4:40, Hem4:69, Hem5:102, Hem5:120, Hem5:149, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:54, Hem5:70, Hem5:93, Hem6:244, Hem6:27, Hem6:283, HN14:10, HN14:11, HN14:4, HN15:11, HN16:12, HN17/18:26, HN21:5, HN4:7, HN6:14, HN8:12, HN9:2, HN9:4, HSGN1:4, HSGN12:2, HSGN13:1, HSGN7:5, JSBE6:55-56, PTSLENHS1962:123-183, S&L1959, TRESL112:173-220
- as Liorrhyssus hyalinus LondonHets

# Myrmus miriformis (Fallén) (Rhopalidae)

- as M. miriformis EMM81:253-273
- as Myr. miriformis EMM91:7-27
- as *Myrmus* EMM21:19-20
- as Myrmus miriformis BJENH18:209, BJENH21:205-214, BJENH28:5-15, Butler1923, CornwallHets, D&S1865, EG20:125-135, EG43:221-226, EMM123:77-81, EMM133:17-26, EMM26:81-82, EMM28:290, EMM37:49, EMM4:30-33, EMM44:32-34, EMM48:36-38, EMM58:231, EMM59:203-204, EMM60:117-118, EMM60:37-39, EMM63:41-42, EMM64:218, EMM64:62-64, EMM65:40-42, EMM69:234-245, EMM72:258-259, EMM77:273-278, EMM86:6-8, EMM88:22, EMM88:255, EMM91:143, EMM92:54-64, EMM94:183, Ent27:222, Ent28:312, Ent71:148-153, Ent86:34-40, Ent92:6-13, ERJV21:272-276, ERJV47:13-14, GloucsHets, HantsHets, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem2:13, Hem2:31, Hem3:129, Hem3:2, Hem3:40, Hem3:75, Hem3:84, Hem3:93, Hem4:102, Hem4:131, Hem4:147, Hem4:18, Hem4:27, Hem4:3, Hem4:69, Hem4:86, Hem5:102, Hem5:120, Hem5:17, Hem5:188, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:54, Hem5:70, Hem5:93, Hem6:27, HN17/18:26, HN2:7, HSGN1:13, HSGN11:10, HSGN6:3, LondonHets, PRESL(A)29:32-38, PTSLENHS1936-37:29-30, PTSLENHS1936-37:30-32, PTSLENHS1937-38:49-50, PTSLENHS1946-47:73-74, PTSLENHS1949-50:36-38, PTSLENHS1949-50:78, PTSLENHS1950-51:75-76, PTSLENHS1962:123-183, S&L1959. Saunders 1892, Synopsis 1875, TRESL 103:171-218, TSBE 1:51-84, TSBE 11:245-280, TSBE2:47-67
- as Myrmus myriformis PTBENHS12:12, SuffolkHets

#### Rhopalus maculatus (Fieber) (Rhopalidae)

- as Aeschynteles maculatus Ent89:223-231
- as *Aeschyntelus maculatus* BJENH25:205-215, EMM95:287-288, LondonHets, PTBENHS18:20, PTSLENHS1962:123-183, S&L1959

- as Coriscus maculatus ERJV19:220
- as Corixus maculatus Ent40:239
- as *Corizus maculatus* Butler1923, D&S1865, EMM18:140, EMM19:140, EMM25:401-402, EMM35:270, EMM36:14, EMM38:269-270, EMM69:234-245, EMM72:210-219, Ent47:146-147, Ent59:84-85, Ent74:240, ERJV32:42, HantsHets, PESL1876:xxvi, PSLENHS1907-08:70, PSLENHS1919-20:82, PTSLENHS1935-36:27-28, Saunders1892, Synopsis1875
- as Coryzus maculatus EMM13:113-114
- as R. maculatus EMM81:253-273
- as Rho. maculatus EMM91:7-27
- as *Rhopalus maculatus* BJENH16:186, BJENH25:205-215, EMM133:79-80, EMM137:231-232, EMM77:273-278, EMM87:172-173, EMM88:45, EMM92:54-64, Hem1:26, Hem1:36, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem3:2, Hem3:40, Hem4:131, Hem4:27, Hem4:3, Hem4:40, Hem4:69, Hem5:102, Hem5:135, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:54, Hem5:70, Hem6:27, HN17/18:26, HN3:5, HN9:2, HN9:5, HN9:6, HN9:7, HSGN4:A9, HSGN8:8, LondonHets, PTSLENHS1949-50:71-73, TSBE11:245-280

## Rhopalus parumpunctatus Schilling (Rhopalidae)

- as *Corizus parumpunctatus* Butler1923, D&S1865, EMM35:270, EMM36:94-101, EMM38:269-270, EMM39:17-18, EMM48:108-111, EMM60:39, EMM62:38-39, EMM69:234-245, EMM71:113-114, EMM8:136-137, EMM9:192-193, HantsHets, IrelandHets, Saunders1892, SuffolkHets, Synopsis1875, TSBE1:51-84
- as R. parumpunctatus EMM81:253-273, EMM82:94-95
- as Rho. parumpunctatus EMM91:7-27
- as Rhopalus parampunctatus Ent100:157-165
- as *Rhopalus parumpunctatus* BJENH2:53-54, BJENH29:69-88, CornwallHets, EMM133:175-176, EMM133:79-80, EMM77:273-278, EMM81:278-279, EMM85:264, EMM88:255, EMM88:45, EMM97:232, Ent88:10-17, Ent92:6-13, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem2:13, Hem3:2, Hem3:22, Hem3:23, Hem3:40, Hem3:56, Hem3:75, Hem3:84, Hem3:93, Hem4:102, Hem4:131, Hem4:17, Hem4:18, Hem4:27, Hem4:3, Hem4:69, Hem5:102, Hem5:149, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:54, Hem5:70, Hem5:93, Hem6:244, Hem6:247, Hem6:248, Hem6:28, HN10:5, HN10:6, HN11:15, HN5:7, HN6:2, HN6:5, HN9:15, HSGN11:10, HSGN11:8, LondonHets, PRESL(A)29:32-38, PTBENHS19:55, PTSLENHS1949-50:17, PTSLENHS1949-50:78, PTSLENHS1962:123-183, S&L1959, TSBE11:245-280

## Rhopalus rufus Schilling (Rhopalidae)

- as Corizus rufus Butler1923, EMM62:38-39, EMM64:64, HantsHets
- as *R. rufus* EMM81:253-273
- as Rho. rufus EMM91:7-27
- as *Rhopalus rufus* BJENH20:192, EMM133:175-176, EMM133:79-80, EMM134:265-266, EMM77:273-278, EMM87:288, EMM88:45, EMM90:250, Ent88:10-17, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem3:2, Hem3:40, Hem4:27, Hem4:3, Hem4:40, Hem4:69, Hem5:102, Hem5:192, Hem5:2, Hem5:26, Hem5:54, Hem5:70, Hem6:28, HN17/18:8, HSGN12:8, HSGN7:3, HSGN8:8, LondonHets, PTSLENHS1951-52:17-18, S&L1959

#### Rhopalus subrufus (Gmelin) (Rhopalidae)

- as *Corizus capitatus* D&S1865, EMM18:113, EMM25:401-402, EMM33:236, EMM40:100-103, EMM43:196-202, EMM51:220, EMM65:40-42, EMM69:234-245, Ent37:292, PSLENHS1904:75, Saunders1892, SuffolkHets, Synopsis1875
- as *Corizus subrufus* Butler1923, EMM66:43-44, EMM74:20-21, EMM82:199-200, ERJV21:272-276, HantsHets, TSBE1:51-84
- as R. subrufus EMM81:253-273, EMM82:94-95
- as Rho. subrufus EMM91:7-27
- as *Rhopalus subrufus* BJENH17:137-141, BJENH17:181-182, BJENH17:186, BJENH18:233-252, BJENH28:5-15, CornwallHets, EG20:125-135, EMM114:159, EMM133:17-26, EMM133:79-

80, EMM150:63-64, EMM77:273-278, EMM79:256, EMM81:163-164, EMM86:26-28, EMM86:6-8, EMM87:201, EMM87:236, EMM95:14, Ent88:33-36, Ent92:6-13, ERJV111:135-136, ERJV111:204, ERJV112:267-268, ERJV116:118-190, ERJV125:74-76, GloucsHets, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem2:13, Hem2:21, Hem2:26, Hem2:31, Hem3:129, Hem3:2, Hem3:40, Hem3:75, Hem3:84, Hem3:93, Hem4:102, Hem4:131, Hem4:151, Hem4:27, Hem4:3, Hem4:40, Hem4:69, Hem4:86, Hem5:102, Hem5:120, Hem5:149, Hem5:17, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem5:55, Hem5:70, Hem5:93, Hem6:237, Hem6:239, Hem6:28, HN13:11, HN14:12, HN15:11, HN16:13, HN17/18:26, HN6:8, HN9:15, LondonHets, PTBENHS17:86-87, PTSLENHS1944-45:9, PTSLENHS1950-51:77-78, PTSLENHS1951-52:43-44, PTSLENHS1951-52:72-73, PTSLENHS1952-53:85-86, PTSLENHS1962:104, PTSLENHS1962:123-183, PTSLENHS1964:37-38, PTSLENHS1965:83, S&L1959, TSBE11:245-280, TSBE15:117-134

## Stictopleurus abutilon (Rossi) (Rhopalidae)

- as Corizus Abutilon EMM7:208, EMM8:136-137, EMM8:23-29
- as Corizus abutilon Synopsis1875
- as Corizus crassicornis EMM69:234-245
- as Corizus crassicornis var. abutilon Butler1923
- as Corizus crassicornis var. arbutilon HantsHets
- as *S. pictus* EMM81:253-273
- as St. pictus EMM91:7-27
- as Stictopleuron abutilon HN11:12
- as Stictopleurus abutilon BJENH10:177, BJENH10:178-179, BJENH14:168, BJENH16:109-121, BJENH17:137-141, BJENH17:181-182, BJENH17:182-183, BJENH18:209, BJENH20:192, BJENH20:193-194, BJENH25:174, BJENH25:205-215, BJENH29:69-88, EG29:261-264, EMM133:175-176, EMM133:261-262, EMM134:265-266, EMM143:89, EMM144:163-176, ERJV111:135-136, ERJV112:267-268, ERJV116:118-190, ERJV125:74-76, Hem1:4, Hem1:42, Hem1:43, Hem2:31, Hem2:4, Hem3:129, Hem3:2, Hem3:40, Hem3:93, Hem4:102, Hem4:132, Hem4:152, Hem4:27, Hem4:3, Hem4:37, Hem4:69, Hem4:86, Hem5:102, Hem5:149, Hem5:192, Hem5:2, Hem5:26, Hem5:93, Hem6:221, Hem6:246, Hem6:248, Hem6:29, HN10:5, HN10:6, HN11:12, HN11:14, HN11:16, HN13:10, HN14:10, HN15:11, HN15:13, HN16:13, HN17/18:8, HN19/20:12, HN22:8, HN4:3, HN4:7, HN6:10, HN6:14, HN6:8, HN6:9, HN8:13, HN9:15, HSGN13:1, HSGN14:1, PTSLENHS1962:123-183, S&L1959
- as Stictopleurus pictus TSBE11:245-280

#### Stictopleurus punctatonervosus (Goeze) (Rhopalidae)

- as Corizus crassicornis Synopsis1875
- as Stictopleurus punctatonervosus BJENH12:180, BJENH14:168, BJENH15:180, BJENH16:109-121, BJENH17:137-141, BJENH17:15-23, BJENH17:181-182, BJENH17:182-183, BJENH18:208, BJENH18:209, BJENH19:189-190, BJENH20:193-194, BJENH20:213-216, BJENH25:174, BJENH25:205-215, BJENH29:69-88, EG29:261-264, EMM143:89, EMM149:136-137, ERJV111:135-136, ERJV112:267-268, ERJV116:118-190, ERJV125:74-76, GloucsHets, Hem1:4, Hem1:42, Hem1:43, Hem2:31, Hem2:4, Hem3:2, Hem3:41, Hem3:75, Hem3:84, Hem3:93, Hem4:102, Hem4:128, Hem4:132, Hem4:144, Hem4:147, Hem4:27, Hem4:3, Hem4:69, Hem4:86, Hem5:102, Hem5:149, Hem5:192, Hem5:2, Hem5:26, Hem5:40, Hem6:219, Hem6:221, Hem6:237, Hem6:238, Hem6:246, Hem6:247, Hem6:248, Hem6:270, Hem6:29, HN10:5, HN10:6, HN11:14, HN11:16, HN12:18, HN13:10, HN13:11, HN14:10, HN14:12, HN15:11, HN15:13, HN16:13, HN19/20:12, HN22:8, HN3:5, HN4:7, HN6:10, HN6:8, HN9:2, HSGN13:1, HSGN14:1, PTSLENHS1950-51:71-72

#### Stictopleurus punctatonervosus/abutilon AMBIGUOUS (Rhopalidae)

- as *Corizus crassicornis* Butler1923, D&S1865, EG29:261-264, EMM36:94-101, HantsHets, Saunders1892, Synopsis1875
- as S. pictus Hem1:93

- as S. punctatonervosus EMM81:253-273
- as St. punctatonervosus EMM91:7-27, Hem1:93
- as Stictopleurus abutilon EMM77:273-278, HSGN12:8, HSGN4:A10, HSGN8:8
- as Stictopleurus crassicornis EG29:261-264, EMM77:273-278
- as Stictopleurus pictus EG29:261-264, EMM77:273-278
- as *Stictopleurus punctatonervosus* EMM77:273-278, HSGN4:A10, HSGN8:8, LondonHets, PTSLENHS1962:123-183, S&L1959, TSBE11:245-280

#### **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vicecounty Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above. Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

# Brachycarenus tigrinus (Schilling) (Rhopalidae)

Common name. The Filigree Stipplebug.

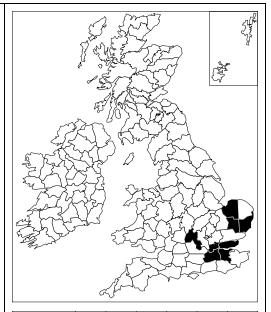
First report. BJENH17:137-141 as Brachycarenus tigrinus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from brownfield site, disused railway siding, arable field edge, woodland track and bare sandy ground; by sweeping and beating. Specific plant associations include Dittander (Lepidium latifolium) and Lawson Cypress.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June				3	3	
July			1			1
August				1	1	1
September	2		3			
October						
November						
December						



# Chorosoma schillingii (Schilling) (Rhopalidae)

Common name. The Stick Stipplebug.

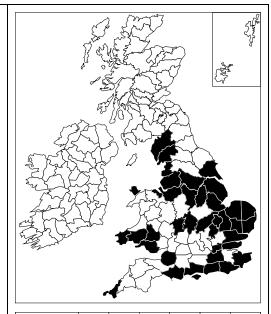
First report. D&S1865 as Chorosoma Schillingi.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from clay pits, brownfield site, sandhills, rough grassland, river embankment, marsh, arable fields, chalk slope, waste ground and roadside verge; by sweeping, on plants (n) and in flight. Specific plant associations include marram grass (n), rushes and rosebay willowherb. In culture, laid egg on stalk of marram grass.



	1-5	6-10	11-15	16-20	21-25	26-
January	1					
February						
March						
April						
May						
June						
July	N	1 N	3	4	2	
August	3	4	3	1	2	2
September	2	3	1	1	1	
October						
November						
December						



#### Corizus hyoscyami (Linnaeus) (Rhopalidae)

Common name. The Geranium Stipplebug.

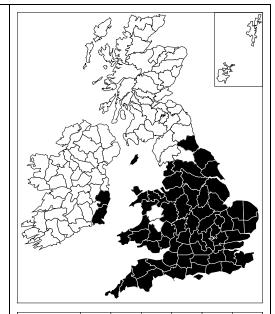
First report. D&S1865 as Therapha Hyoscyami.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sandhills (n), woodland, foreshore, field edge (n), disused airfield (n), scrubby bog, garden (n), ornamental park, brownfield site, rough grassland, cliffs, sand quarry (n), grass bank, rail embankment (n), railway sidings, dismantled railway line, roadside, lake/pond edge, hillside pasture and river bank (n); by sweeping (n), beating (n, w), suction sampling, on (n) and under plants. Specific plant associations include Anthyllis vulnerata, Artemisia, Erodium (n), Aster, Tsuga, cut-leaved cranesbill (n), juniper (w), roundleaved cranesbill (n), spruce, Centranthus, creeping thistle, blackberry, yarrow, Corydalis, Daucus carotas, Euphorbia, Aquilegia, sow thistle, sallow, Inula, Leucanthemum, Matricaria, Abies, Lawson's cypress, Ononis (n), Eryngium, Fuchsia, Achillea, Pulicaria, Tripleurospermum, ox-eye daisy, ramping fumitory, rosemary, red clover, Taraxacum, Picris, Senecio and grass. Seen to feed on Aquilegia fruits and on the developing achenes of sow thistle.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March				1		
April		2		2	4	1
May	2	3	1	3	2	3
June	1	5	5	4	6	1
July	1	2	1	5 N	7 N	8 N
August	11	11	9	15 N	5	11 N
September	9	9	6	4 N	3	5 N
October	4	1	3 N		4	2
November	1					
December					1	



# Liorhyssus hyalinus (Fabricius) (Rhopalidae)

Common name. The Glassy Stipplebug.

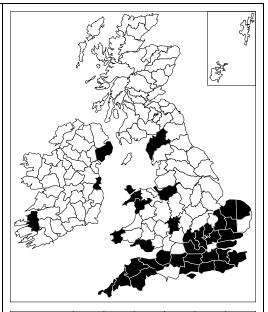
First report. EMM39:294 as Corizus hyalinus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from field margin, garden, cliffs, heath, rabbit scrapes (n), brownfield site, quarry (n), meadow, sandy field, cemetery, grassy areas, waste ground, dunes (n), wood, marsh and sand pit; by sweeping, beating, at light, on (n) and under (n) plants. Specific plant associations include Erodium (n), moss, sorrel, creeping willow, Pieris echioides, Sonchus asper and sedges.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May				1		3
June	2	3	1	5	1	1
July	2	3	7 N		1	5
August	2	2	1	1	5	1 N
September	2	4 N	4 N	1	1	
October	3					
November						
December						



## Myrmus miriformis (Fallén) (Rhopalidae)

Common name. The Grassland Stipplebug.

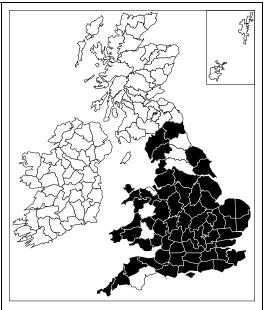
First report. D&S1865 as Myrmus miriformis.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from stony valley bottom, derelict land, dry meadow, hillside, sand pit, heath, sandhills and chalk grassland; by sweeping (n), suction sampling and on plants. Specific plant associations include grass, rushes, bracken, hare's foot trefoil, lupin, Melampyrum, Calluna and Psamma. It has been seen feeding on the leaves and unripe seeds of grasses. Nymphs have been seen sucking grass in culture.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May						
June			1 N	2 N	1 N	1 N
July	7	4 N	7	10	10	9
August	6	6	9	6	7	3
September	7	4	6	4	1	1
October	1					
November						
December						



## Rhopalus maculatus (Fieber) (Rhopalidae)

Common name. The Marsh Stipplebug.

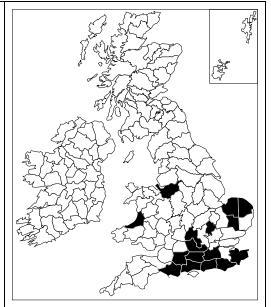
First report. D&S1865 as Corizus maculatus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from marsh, wet heathland, heathy ground (n) and woodland ride; by sweeping (n), on (n) and at the roots of (n) plants. Specific plant associations include *Poa nemoralis*, birch, *Juncus*, bramble, *Molinia*, *Myrica gale*, marsh cinquefoil (n), Skullcap and common tormentil (n). In culture, nymphs have been seen feeding on the green seed pods of *Hypericum pulchrum*.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						1
May			1	1		1
June	2	1	1	1		
July				N	N	
August		1		3	1	
September	1	4 N	2		1	2 N
October				1		
November			1			
December						

No habitus images are available.

# Rhopalus parumpunctatus Schilling (Rhopalidae)

Common name. The Pale Stipplebug.

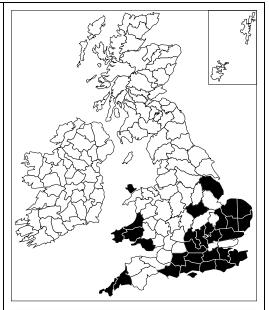
First report. D&S1865 as Corizus parumpunctatus.

Ambiguities. None reported.

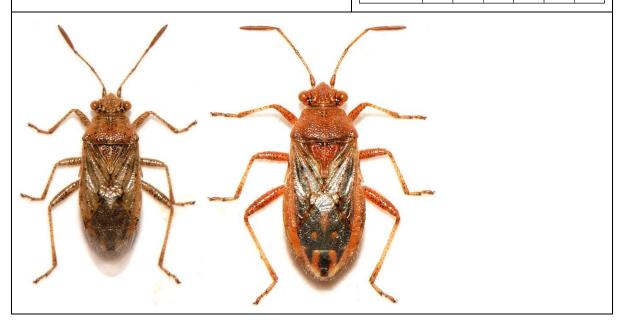
Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sand pit (n), roadside, landfill site, wood, uncultivated field, dunes, cinder-covered waste land (n) and brownfield site; by seeping, in flight, on (n) and under (n) plants. Specific plant associations include Spergularia (n), Echium vulgare, Spiraea, marram, dodder, Erodium (n), Hypericum, Cerastium vulgatum (n), hare's foot trefoil, Erica, Senecio jacobea and Pimpisella saxifraga. In culture, laid eggs and hatched nymphs seen feeding on the inflorescences of Dactylis glomerata and sepals of Geranium and Erodium.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May					1	
June				3	1	
July		1			3	3
August	2		3 N	2		2 N
September	3	3		3		2
October	1		1			
November						
December						



# Rhopalus rufus Schilling (Rhopalidae)

Common name. The Scarce Stipplebug.

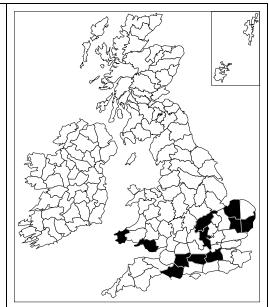
First report. Butler1923 as Corizus rufus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from heaths and open sandy ground; by sweeping, on (n) and under plants. Specific plant associations include heather/heath, corn spurrey (n), sand spurrey (n) and *Erodium/Ononis*.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April			1			
May		2				
June						
July				1		
August		2				1
September	1	2	2	2		
October						
November						
December						

No habitus images are available.

## Rhopalus subrufus (Gmelin) (Rhopalidae)

Common name. The Crimson Stipplebug.

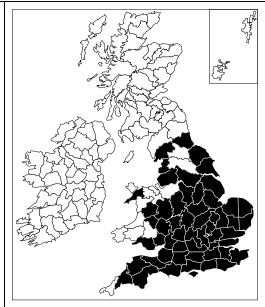
First report. D&S1865 as Corizus capitatus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from field edge (n), brownfield site, hedge, birch, downs, post-industrial sites, garden, woods, dismantled railway line, disused airfield (n), sandy ground and a lane; by sweeping (n), beating (n), on and under plants. Specific plant associations include cut-leaved cranesbill, round-leaved cranesbill (n), St John's wort, Betula, Geum, Teucrium botrys, Teucrium scorodonia and heather.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March					1	
April				2	2	
May	1	3	1	3	2	3
June	9	2	2	3	3	1
July		1	2	1		6 N
August		2		6	3	3
September	2	6 N	4		3	
October	2	2	1			
November		1				
December						



# Stictopleurus abutilon (Rossi) (Rhopalidae)

Common name. The Spectacled Stipplebug.

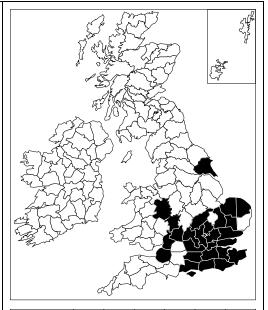
First report. EMM8:23-29 as Corizus Abutilon. The Corizus crassicornis of D&S1865 may refer to this species. (Hem7:281-284.)

Ambiguities. Prior to EG29:261-264 some records for this genus could refer to either species of *Stictopleurus* (Hem7:281-284).

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from field edges, brownfield sites, waste ground, derelict field, disused airfield, wood, grassland, heathland, soft cliffs, coast, sandy ground, meadow and railway embankment; by sweeping (n), at light and on plants (n). Specific plant associations include marram, fleabane (n), shepherd's purse and rough hawkbit (n). Nymphs have been seen feeding on the developing achenes of fleabane.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						
May		1			1	
June				4	1	2
July		1			3	3
August	1	3	6	2	1	1
September	6	2	1	1	3 N	2
October	2	1	1 N		1	
November	1					
December						



## Stictopleurus punctatonervosus (Goeze) (Rhopalidae)

Common name. The Dark Stipplebug.

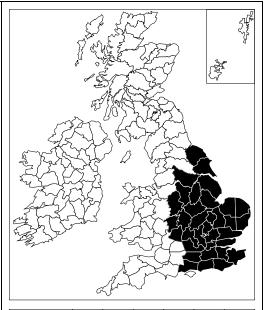
First report. Synopsis1875 as Corizus crassicornis. The Corizus crassicornis of D&S1865 may refer to this species. (Hem7:281-284.)

Ambiguities. Prior to EG29:261-264 some records for this genus could refer to either species of *Stictopleurus* (Hem7:281-284).

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from field edges, brownfield site (n), railway sidings, disused airfield, sandy ground (n), grassland, woodland, waste ground, river embankment, meadow, railway embankment, short mown vegetation in hotel grounds and garden; by sweeping (n), suction sampling and on plants (n). Specific plant associations include sowthistle, Oenanthe (n), tansy, grass and mugwort. Feeding has been observed on the achenes of sowthistle.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April						1
May		1	1	2	1	2
June	1 N		1	6		1
July	2	6 N	2	5	1	2
August	4	3	4	4 N	2	2
September	5	1	3	3 N	6	10
October	2	2	2 N	1	1	1
November	1	1				
December						



# A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (11) THE FAMILY PYRRHOCORIDAE

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#### Introduction

This is the eleventh part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Pyrrhocoridae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

#### **Heximonth records**

Pyrrhocoris apterus (Linnaeus) (Pyrrhocoridae)

04B: 7 April 2006 [Brooke, VC27. Hem4:40]

04D: 18 April 1961 [Oar Stone rock, Tor Bay, South Devon. Adults. EMM97:96]

07E: 23 July 2007 [Near Sandy, Bedfordshire. Mating adults and nymphs. HN10:12]

08D: 16 August 2009 [Beeston, VC30. HN15:12]

09D: 18 September 2007 [Near Sandy, Bedfordshire. Adults and nymphs. HN10:12]

#### **Detailed records**

Pyrrhocoris apterus (Linnaeus) (Pyrrhocoridae)

Under fragments of rock [Oar Stone rock, Tor Bay, South Devon. 18 April 1961. Adults. EMM97:96]

Around derelict glasshouses on seed heads of Common Mallow (*Malva sylvestris*) and along a road on the ground amongst litter [Near Sandy, Bedfordshire. 23 July 2007. Mating adults and nymphs. HN10:12]

On or near mallow (*Malva sylvestris*), along the margins of a tarmac access road, on a concrete turning area at the end of the road, and at the edge of a potato field [Beeston, VC30. 16 August 2009. HN15:12]

On derelict glasshouses and along a road [Near Sandy, Bedfordshire. 18 September 2007. Adults and nymphs. HN10:12]

On sandy banks [Beccles, Suffolk. May. Apterous pairs. SuffolkHets] In a garden [Beside River Adur, Shoreham-by-Sea, VC13. HN13:9] Feed on tree mallow, especially the seeds [Britain. Adults and nymphs. S&L1959] Coastal sandbanks [Britain. S&L1959]

On the ground beside a 50m stretch of alley-way through an industrial estate. Observed feeding on fallen grass seeds, blackberries and fruits of Common Mallow [Epsom, Surrey. July 1996. Adult brachypters and nymphs. BJENH10:219]

On Tree Mallow (*Lavatera arborea*) and running on the ground [Oar Stone Rock, Tor Bay, Torquay, South Devon. August 1953. EMM90:45-46]

## **Bibliography**

Pyrrhocoris apterus (Linnaeus) (Pyrrhocoridae)

as *P. apterus* EMM81:253-273

as Pyrrh. apterus EMM91:7-27

as *Pyrrhocoris apterus* BJENH10:219, BJENH21:184-185, Butler1923, CornwallHets, D&S1865, EMM15:135-136, EMM34:112, EMM4:30-33, EMM69:234-245, EMM90:45-46, EMM92:189-193, EMM97:96, Ent10:214-215, ERJV94:96, HantsHets, Hem1:4, Hem1:42, Hem1:43, Hem1:95, Hem2:13, Hem3:2, Hem4:27, Hem4:3, Hem4:40, Hem4:69, Hem4:86, Hem5:102, Hem5:120, Hem5:149, Hem5:192, Hem5:2, Hem5:26, Hem6:271, Hem6:29, HN10:12, HN11:15, HN13:9, HN15:12, HN16:3, HN9:6, HN9:7, HSGN1:4, HSGN13:1, HSGN13:12, HSGN8:8, IrelandHets, PRESL(A)38:15-22, PTSLENHS1953-54:36, PTSLENHS1956:111-136, S&L1959, Saunders1892, SuffolkHets, Synopsis1875

#### **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vicecounty Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above. Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

## Pyrrhocoris apterus (Linnaeus) (Pyrrhocoridae)

Common name. The Firebug.

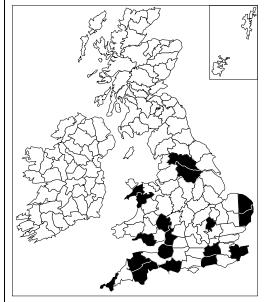
First report. D&S1865 as Pyrrhocoris apterus.

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from under fragments of rock, amongst litter, on the ground (n), on buildings (n), on plants (n), a field edge, in a garden, and on sandy banks. Specific plant associations include tree mallow (n) and common mallow (n). It has been observed feeding on fallen grass seeds, blackberries and fruits of common mallow.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April		1		1		
May						
June						
July					1 N	
August				1		
September				1 N		
October						
November						
December						

No habitus images are available.

# A REVIEW OF THE PUBLISHED RECORDS FOR THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES: (12) THE FAMILY STENOCEPHALIDAE

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#### Introduction

This is the twelfth part of the review of the records of Hemiptera-Heteroptera in the British Isles published in the specialist entomological literature, which covers the Stenocephalidae, up to the end of 2019. The scope, objectives and method of this work are set out in the Introduction (first part) of the review (Hem7:1-5). The vice-county records for the bugs have already been presented elsewhere in this journal, and are summarised in the latest interim release of the Vice-county Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The remaining results of the review are given below, which are limited to records explicitly stated as being from the British Isles. These results comprise a list of all the heximonth records, that is records dated with sufficient precision to be assigned to a specific heximonth (Hem5:52-68); and a list of all the detailed records, that is, records that are not limited to date and location and refer to other aspects of the species' natural history. Duplicate records, the same record published in different articles, are excluded, with only the original record included. There is also a complete bibliography of all the references consulted in this part of the review. These are grouped by the names used in the literature, and thereby provide a synonymy for each species, for those sources listed in the Introduction. There is no reference list, instead references are cited in-line using the method of abbreviation described in the Introduction. Records which refer to ambiguous species names (Hem2:4-8, Hem3:15-17, Hem5:14-15 & Hem5:114-118) are listed separately, under a heading marked 'AMBIGUOUS'. The article is concluded with a tabulated summary of the results of the review, which excludes ambiguous records.

What is not stated in this review (the 'gaps') is arguably just as important as what is stated, which hopefully will provide an impetus to future research on the Hemiptera-Heteroptera in these islands. Consequently, I would be grateful to hear from any reader who has information which is new to that collected in this review, and who would be willing to publish it.

#### **Heximonth records**

Dicranocephalus agilis (Scopoli) (Stenocephalidae)

04D: 18 April 1984 [Upton Towans, Cornwall. CornwallHets]

04F: 28 April 1996 [Holywell Dunes, Cornwall. CornwallHets]

05B: 9 May 1948 [Near Amersham, Buckinghamshire. Pair in copula. EMM85:253]

05D: 19 May 1934 [Ballyteige, Co Waterford. IrelandHets]

05E: 22 May 1928 [Lelant Towans, Cornwall. TSBE1:51-84]

06B: 8 June 1956 [Constantine Bay, Cornwall. CornwallHets] 10 June 1999 [Loe Bar, Cornwall. CornwallHets] 10 June 1956 [Penhale Sands, Cornwall. CornwallHets] 7 June 1956 [Rock, Cornwall. CornwallHets]

06C: 13 June 1989 [Braunton Burrows, North Devon. BJENH4:119-121]

06D: 16 June 2004 [Porth Joke, Cornwall. CornwallHets]

06F: 27 June 1990 [Gammon Head, South Devon. BJENH4:119-121] 26 June 1990 [Gara Rock, South Devon. BJENH4:119-121] 26 June 1990 [Moor Sand, Devon. BJENH4:43] 30 June 1994 [Traeth Penbryn, Cardiganshire. Adults. BJENH9:3-5]

07A: 2 July 1990 [Bolt Head, South Devon. BJENH4:119-121] 5 July 1984 [Samson North End, Cornwall. CornwallHets]

07B: 10 July 1927 [Cahore, Co Wexford. IrelandHets] 9 July 1989 [Constantine Bay, Cornwall. CornwallHets] 10 July 1979 [Holywell Dunes, Cornwall. CornwallHets] 6 July 1995 [Portland, Dorset. EMM134:265-266]

07C: 11 July 1926 [Magherabeg, Co Wicklow. Adults and nymphs. IrelandHets] 12 July 2006 [Porthtowan, Cornwall. Nymphs. CornwallHets] 11 July 2003 [West Pentire, West Cornwall. BJENH18:165-170]

07E: 25 July 1994 [Deep Slade, Pwlldhu Head, Gower, Glamorganshire. Nymphs. BJENH9:3-5]

08B: 7 August 1999 [Lantic Bay, Cornwall. CornwallHets] 8 August 1928 [Lelant Towans, Cornwall. TSBE1:51-84]

08C: 11 August 1999 [Lantic Bay, Cornwall. CornwallHets]

08D: 16 August 1925 [Kilgorman, Co Wexford. IrelandHets]

08E: 24 August 1931 [Ballyteige, Co Waterford. Adults and nymph. IrelandHets]

08F: 27 August 2005 [Hatch's Hill, Angarrack, Cornwall. CornwallHets] 30 August 1930 [Penhale Point, Cornwall. TSBE1:51-84]

09A: 4 September 1992 [Loe Bar, west Cornwall. BJENH7:174-175] 5 September 1929 [Tramore, Co Waterford. IrelandHets]

09B: 9 September 1992 [Common Towans, Cornwall. CornwallHets] 7 September 1950 [Merthyr Mawr, Glamorganshire. Male. EMM92:54-64] 7 September 1950 [Rhossilli Bay, Glamorgan. EMM87:139]

09C: 14 September 1992 [Loe Bar, Cornwall, CornwallHets]

09D: 18 September 1929 [Arklow, Co Wicklow. Nymphs. IrelandHets]

Dicranocephalus agilis/medius AMBIGUOUS (Stenocephalidae)

08C: 13 August 1870 [South Wales. EMM7:157]

Dicranocephalus albipes (Fabricius) (Stenocephalidae)

07E: 23 July [Tenby Burrows. Nymph reared in culture. Ent60:209]

Dicranocephalus medius (Mulsant & Rey) (Stenocephalidae)

02C: 12 February 1950 [West Tytherley, Hampshire/Wiltshire border. EMM87:139]

03A: 3 March 1951 [Latimer, Buckinghamshire. LondonHets]

05B: 9 May 1948 [Amersham, Buckinghamshire. LondonHets] 9 May 1948 [Near Burnham, Buckinghamshire. Pair *in copula*. LondonHets]

05D: 19 May 2014 [Mallard's Pike, Gloucestershire. HN22:10]

05E: 21 May 1991 [Folkestone Warren, East Kent. BJENH7:174-175]

05F: 27 May 1950 [Church Woods, Blean, Kent. EMM86:224]

06A: 3 June 2015 [Black Wood, near Micheldever, VC12. Adults and nymphs. BJENH29:117] 1 June 2007 [Botley Wood, VC11. Hem3:104]

06B: 8 June 2009 [Bulford Field, South Wiltshire. BJENH23:204] 6 June 1996 [Kenley Common, Surrey. Mating pair. BJENH10:176-177]

06C: 13 June 1955 [Avon Gorge, Bristol, Gloucestershire. EMM92:67] 14 June 1990 [Hembury Woods, Devon. Nymphs. BJENH4:43]

06D: 17 June 1983 [Folkestone Warren, Kent. PTBENHS18:20] 17 June 1995 [Hazelbridge, near Chiddingfold, Surrey. Male. EMM133:79-80]

06E: 22 June 1901 [Burnham, Buckinghamshire. LondonHets] 23 June 2014 [Mitcham Common, VC17. Adults. HN22:5]

06F: 29 June 2002 [Bolnore Village, VC13. Adults. HN3:5]

07B: 9 July 1950 [Wishford, Wiltshire. EMM88:45]

08A: 4 August 1921 [Darenth Wood, Kent. LondonHets]

08B: 8 August 1893 [Maidenhead Thicket. Adult female and male nymph reared in culture. EMM47:134-135]

08E: 24 August 1957 [Portland Bill, Dorset. Nymph reared in culture. EMM94:99]

09B: 10 September 1934 [New Forest. EMM71:113-114]

09C: 15 September 2004 [East Coppice, Bloxworth, VC9. Adults and nymphs. HN4:5]

10E: 25 October 1998 [Randwick, Gloucestershire. BJENH12:179]

#### **Detailed records**

Dicranocephalus agilis (Scopoli) (Stenocephalidae)

Sweeping in a clearing in a beechwood [Near Amersham, Buckinghamshire. 9 May 1948. Pair *in copula*. EMM85:253]

On shingle [Loe Bar, Cornwall. 10 June 1999. CornwallHets]

Sand dunes [Braunton Burrows, North Devon. 13 June 1989. BJENH4:119-121]

Amongst Portland spurge on sea cliffs [Moor Sand, Devon. 26 June 1990. BJENH4:43]

Sand dune [Traeth Penbryn, Cardiganshire. 30 June 1994. Adults. BJENH9:3-5]

On Portland Spurge (Euphorbia portlandica) [Portland, Dorset. 6 July 1995. EMM134:265-266]

Sandhills [Magherabeg, Co Wicklow. 11 July 1926. Adults and nymphs. IrelandHets]

In arable fields [West Pentire, West Cornwall. 11 July 2003. BJENH18:165-170]

On *Euphorbia paralias* growing on head cliff [Deep Slade, Pwlldhu Head, Gower, Glamorganshire. 25 July 1994. Nymphs. BJENH9:3-5]

Sandhills [Kilgorman, Co Wexford. 16 August 1925. IrelandHets]

Sandhills, under *Ononis* [Ballyteige, Co Waterford. 24 August 1931. Adults and nymph. IrelandHets]

In a garden [Hatch's Hill, Angarrack, Cornwall. 27 August 2005. CornwallHets]

Amongst *Euphorbia* [Penhale Point, Cornwall. 30 August 1930. TSBE1:51-84]

Sandhills [Tramore, Co Waterford. 5 September 1929. IrelandHets]

Sand dunes [Merthyr Mawr, Glamorganshire. 7 September 1950. Male. EMM92:54-64]

At the roots of *Euphorbia paralias* on sandhills and limestone cliffs [Rhossilli Bay, Glamorgan. 7 September 1950. EMM87:139]

Sandhills [Arklow, Co Wicklow. 18 September 1929. Nymphs. IrelandHets]

Sandhills, on *Euphorbia* [Arklow, Co Wicklow. September 1929. Adults and nymphs. IrelandHets]

On the coast [Britain. S&L1959]

Dunes [Castlemartin Peninsula, West Wales. BJENH9:3-5]

Occurred anywhere spurges grew [Constantine Bay, Penhale & Rock, Cornwall. June 1956. Adults and nymphs. EMM92:372-374]

Sand dunes [Constantine Bay, West Cornwall. July 1989. BJENH4:119-121]

On or near Euphorbia at the foot of a cliff [Culver Cliff, Isle of Wight. EMM60:117-118]

Among large stones in grassy places at the base of a cliff [Folkestone. Butler1923]

Associated with *Euphorbia* in sandy and stony coastal areas [Isles of Scilly. August. EMM102:67-69]

At the roots of mat-grass on sandhills [Newtown, Bridgend, South Wales. Butler1923]

From dunes [Pembrey, Carmarthenshire. August 1991. HSGN11:8]

On sands/burrows [Pendine Sands, South Wales. EMM88:22]

On the spurge *Euphorbia portlandica* growing on rocky ground in a quarry [Rock, Cornwall. June 1956. EMM92:372-374]

Sand dunes [South and South-west Wales. HN9:4]

On sand-dunes [South coast of Devon/Cornwall. Ent88:33-36]

Wherever Portland spurge grows in abundance on rocky cliff slopes [South Devon. BJENH4:119-121]

Amongst heavy flints at the base of *Euphorbia* on the seashore [St Ishmael's, Ferryside,

Carmarthenshire. August 1909. Adult and nymphs. Butler1923]

In sand dunes [Whiteford Burrows, Gower coast, South Wales. 1960/1961. Ent100:157-165]

# Dicranocephalus agilis/medius AMBIGUOUS (Stenocephalidae)

At the roots of mat-grass and spurge on sand-hills [South Wales, 13 August 1870, EMM7:157]

Sweeping low plants [Darenth Wood. May & June. EMM7:184-185]

Among Euphorbium on the coast [Devon. September. D&S1865]

Among large stones in grassy places at the bottom of cliffs [Folkestone. June. EMM6:183]

On sandhills [Woolacombe & Shapton, Devon. August & September, 1907. EMM44:32-34]

Dicranocephalus albipes (Fabricius) (Stenocephalidae)

Under a stone [Tenby Burrows. 23 July. Nymph reared in culture. Ent60:209]

Coast [Devon. D&S1865]

Dicranocephalus medius (Mulsant & Rey) (Stenocephalidae)

Beneath the bark of rotten oak logs [West Tytherley, Hampshire/Wiltshire border. 12 February 1950. EMM87:139]

Sweeping in a clearing in a wood [Near Burnham, Buckinghamshire. 9 May 1948. Pair *in copula*. LondonHets]

On a flower of Wood Spurge (*Euphorbia amygdaloides*) [Mallard's Pike, Gloucestershire. 19 May 2014. HN22:10]

On wood spurge [Church Woods, Blean, Kent. 27 May 1950. EMM86:224]

At the base of Wood Spurge (*Euphorbia amygdaloides*) in a recent clearfelled area of a wood [Black Wood, near Micheldever, VC12. 3 June 2015. Adults and nymphs. BJENH29:117]

On Euphorbia [Bulford Field, South Wiltshire. 8 June 2009. BJENH23:204]

Resting on a stone. In culture, fed on the developing fruits of the supplied wood spurge (*Euphorbia amygdaloides*) [Avon Gorge, Bristol, Gloucestershire. 13 June 1955. EMM92:67]

From wood spurge at edge of oakwood [Hembury Woods, Devon. 14 June 1990. Nymphs. BJENH4:43]

Sweeping Wood Spurge [Hazelbridge, near Chiddingfold, Surrey. 17 June 1995. Male. EMM133:79-80]

Associated with the naturalised hybrid spurge *Euphorbia* x *pseudovirgata* growing in acid grassland [Mitcham Common, VC17. 23 June 2014. Adults. HN22:5]

On Wood Spurge (*Euphorbia amygdaloides*) [Bolnore Village, VC13. 29 June 2002. Adults. HN3:5]

Amongst thick grass [Maidenhead Thicket. 8 August 1893. Adult female and male nymph reared in culture. EMM47:134-135]

On bare ground. In culture, fed on sea spurge, becoming adult 16 days later [Portland Bill, Dorset. 24 August 1957. Nymph reared in culture. EMM94:99]

On Wood Spurge (*Euphorbia amygdaloides*) [East Coppice, Bloxworth, VC9. 15 September 2004. Adults and nymphs. HN4:5]

Suction sample [Randwick, Gloucestershire. 25 October 1998. BJENH12:179]

On Euphorbia esula [Aylesford, Kent. TSBE11:245-280]

At inland sites on grassy banks on the sunny side of woods, where *Euphorbia* grows amongst rank growth of bramble [Devon/Cornwall. Ent88:33-36]

On *Euphorbia amygdaloides* growing in open, scrubby undercliffs [East Weare, Portland, Dorset. 2000. Adults. EMM137:231-232]

On Euphorbia amygdaloides [Oxfordshire. EMM81:278-279]

Under stones [Redstone, Reigate, Surrey. LondonHets]

# **Bibliography**

Dicranocephalus agilis (Scopoli) (Stenocephalidae)

as D. agilis EMM81:253-273

as Dicran. agilis EMM91:7-27

as *Dicranocephalus agilis* BJENH18:165-170, BJENH4:119-121, BJENH4:43, BJENH4:43, BJENH7:174-175, BJENH9:3-5, CornwallHets, EMM102:67-69, EMM134:265-266, EMM92:372-374, EMM92:54-64, EMM94:24, EMM94:99, Ent100:157-165, Ent88:33-36, GloucsHets, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem2:13, Hem2:31, Hem3:2, Hem3:22, Hem3:23, Hem3:41, Hem4:102, Hem4:132, Hem4:3, Hem4:69, Hem5:103, Hem5:120, Hem5:159, Hem5:17, Hem5:2, Hem5:40, Hem5:93, Hem6:30, HN17/18:26, HN9:15, HN9:2, HN9:4, HN9:6, HSGN11:8, HSGN11:9, HSGN12:7, HSGN8:8, PTBENHS19:55, PTSLENHS1962:123-183, S&L1959

as Dicranocephalus ogilis Ent88:33-36

as Dicranomerus agilis EMM83:95, EMM85:253, EMM87:139, EMM88:22, TSBE11:245-280

as *Stenocephalus agilis* Butler1923, EMM47:134-135, EMM48:108-111, EMM51:220, EMM60:117-118, EMM69:234-245, Ent47:146-147, Ent89:223-231, HantsHets, IrelandHets, TSBE1:51-84

Dicranocephalus agilis/medius AMBIGUOUS (Stenocephalidae)

as Stenocephalus agilis D&S1865, EMM16:182-183, EMM18:140, EMM25:237-238, EMM26:81-82, EMM31:76-77, EMM33:217-220, EMM44:32-34, EMM6:183, EMM61:253-257, EMM7:157, EMM7:184-185, Ent34:135, Ent42:39, Ent42:74, ERJV15:134, Saunders1892, Synopsis1875

Dicranocephalus albipes (Fabricius) (Stenocephalidae)

- as D. albipes EMM81:253-273
- as Dicra. albipes EMM91:7-27
- as *Dicranocephalus albipes* BJENH25:205-215, CornwallHets, EMM92:54-64, EMM94:99, Hem1:103, Hem1:2, Hem1:4, Hem1:42, Hem1:43, Hem2:13, Hem2:42, Hem2:45, Hem3:2, Hem3:41, Hem4:3, Hem5:103, Hem5:120, Hem5:2, Hem6:30, HSGN4:A9, S&L1959
- as Dicranomerus albipes EMM81:253-273
- as Stenocephalus albipes Butler1923, EMM47:134-135, Ent60:209, Ent60:283-284, HantsHets, TSBE1:51-84
- as *Stenocephalus neglectus* D&S1865, EMM43:196-202, EMM69:234-245, EMM7:157, Saunders1892, Synopsis1875

Dicranocephalus medius (Mulsant & Rey) (Stenocephalidae)

- as D. medius EMM81:253-273, EMM82:94-95
- as Dicran. medius EMM91:7-27
- as Dicranocephalus medius BJENH10:176-177, BJENH12:179, BJENH23:204, BJENH29:117, BJENH4:119-121, BJENH4:43, BJENH7:174-175, CornwallHets, EMM133:79-80, EMM137:231-232, EMM92:67, EMM94:99, Ent88:33-36, GloucsHets, Hem1:4, Hem1:42, Hem1:43, Hem1:93, Hem2:31, Hem2:46, Hem3:104, Hem3:129, Hem3:2, Hem3:41, Hem4:128, Hem4:132, Hem4:3, Hem4:69, Hem5:103, Hem5:120, Hem5:14, Hem5:149, Hem5:192, Hem5:2, Hem5:40, Hem5:55, Hem5:70, Hem6:30, HN11:16, HN22:10, HN22:5, HN3:5, HN4:5, HSGN12:7, HSGN7:3, HSGN8:8, LondonHets, PTBENHS18:20, PTSLENHS1962:123-183, S&L1959
- as *Dicranomerus medius* EMM81:278-279, EMM86:224, EMM87:139, EMM88:45, TSBE11:245-280
- as Stenocephalus medius Butler1923, EMM47:134-135, EMM71:113-114, HantsHets

#### **Tabulated summaries**

On the following pages are summaries of the results of this review for each of the species in scope. The common name is that used in the literature consulted; or has been created from aspects of the species natural history. The first report is the first mention of the species in the literature consulted, starting at D&S1865. The ambiguities, if they occur, refer to the ambiguous species names of Hem2:4-8, Hem3:15-17, Hem5:14-15 and Hem5:114-118. The geographical distribution is based upon records published elsewhere in this journal; and is shown as a map from the latest interim release of the Vicecounty Distribution and Atlas (https://sites.google.com/site/BritishHetBugAtlas). The presence of a vice-county record is shown with a black fill, and the absence with a white fill. The seasonal distribution is based on the heximonth records listed above and is shown as a calendar. The presence of an adult record is shown with a black fill, and the absence with a white fill, with a figure representing the number of distinct records in the above list. The existence of nymph and egg records is shown by the letters 'N' and 'E', respectively, without a figure. Heximonth records are assumed to be adult unless explicitly stated otherwise. The other details is a narrative constructed from the detailed records listed above. Aspects of the narrative which include records for nymphs or eggs are marked '(n)' or '(e)', respectively. Those that include winter records (which is defined as 1st January to 31st March) are marked '(w)'. Habitus photographs of the species are included, where available.

## Dicranocephalus agilis (Scopoli) (Stenocephalidae)

Common name. The Coastal Spurgebug.

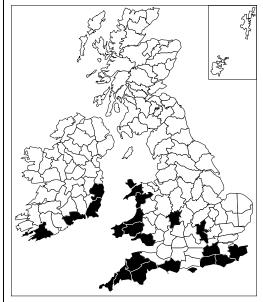
First report. D&S1865 as Stenocephalus agilis.

Ambiguities. Prior to EMM47:134-135 records may refer to *Dicranocephalus medius* (Hem5:14-15).

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from sandhills (n), cliffs (n) and stony areas at the coast (n); by sweeping, on (n) and under (n) plants. Specific plant associations include Euphorbia (n), Ononis (n) and grass. It has also been found in a garden, in arable fields, in a quarry, and [incongruously] in a clearing of a Chilterns beechwood.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February						
March						
April				1		1
May		1		1	1	
June		4	1	1		4
July	2	4	2 N		N	
August		2	1	1	1 N	2
September	2	3	1	N		
October						
November						
December						

No habitus images are available.

# Dicranocephalus albipes (Fabricius) (Stenocephalidae) Common name. The Debated Spurgebug. First report. D&S1865 as Stenocephalus neglectus. Ambiguities. None reported. Geographical distribution. See vice-county map opposite. Seasonal distribution. See heximonth calendar opposite. Other details. Reported from the coast. A nymph found under a stone was reared to adult. 6-10 11-15 16-20 21-25 January February March April May June July N August September October November December No habitus images are available.

# Dicranocephalus medius (Mulsant & Rey) (Stenocephalidae)

Common name. The Woodland Spurgebug.

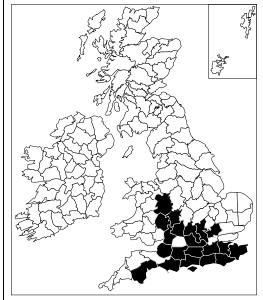
First report. EMM47:134-135 as  $Stenocephalus\ medius.$ 

Ambiguities. None reported.

Geographical distribution. See vice-county map opposite.

Seasonal distribution. See heximonth calendar opposite.

Other details. Reported from woods (n), grassland and scrubby undercliffs; by sweeping, suction sampling, on the ground, on and under (n) plants. Specific plant associations include Euphorbia (n) and grass (n). There is a winter record from beneath the bark of rotten oak logs. In culture, it has been observed feeding on sea spurge and the developing fruits of wood spurge.



	1-5	6-10	11-15	16-20	21-25	26-
January						
February			1			
March	1					
April						
May		2		1	1	1
June	2 N	2	1 N	2	2	1
July		1				
August	1	1 N			N	
September		1	1 N			
October					1	
November						
December						

No habitus images are available.

# MELANOCORYPHUS ALBOMACULATUS (GOEZE, 1778) (HETEROPTERA: LYGAEIDAE) IN BRITAIN

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I spent Sunday 15 September 2019 at home (Eaton Bray, Bedfordshire, VC 30, National Grid Reference SP968208), decorating. I went outdoors only once during the day, to fetch something from our car parked in the driveway. As I came back to the front door, I spotted a striking red and black bug on the cream-painted exterior wall adjacent to the door. I quickly realised it was not *Corizus hyoscyami* (Linnaeus) (Rhopalidae) and nor did it appear to match *Pyrrhocoris apterus* (Linnaeus) (Pyrrhocoridae). I had no tube in my pocket but fortunately I was able to grab the specimen (Figures 1 and 2).

Melanocoryphus albomaculatus (Goeze, 1778) (Lygaeidae) is a species of distinctive appearance, and the Eaton Bray specimen was initially identified by referring to a range of internet images. For greater rigour, the specimen was also keyed out using Péricart (1998) which confirmed the identification as M. albomaculatus. The most similar species in Péricart (1998) is M. tristrami (Douglas & Scott) of the Pontic and eastern Mediterranean region which has the underside of the abdomen black, becoming red towards the sides, unlike the abdominal pattern of M. albomaculatus which is red with black areas at base and apex (Figure 2).

*M. albomaculatus* has a southern distribution in Europe, occurring in most of France, and extending northwards into southern Belgium and southern Germany (Péricart, 1998). It is a thermophilous species in France, favouring south-facing slopes, where it appears to be a seed-feeder, feeding on the seeds of a wide range of herbs (Péricart, 1998).

The circumstances of finding this bug are extraordinary, and make it difficult to judge the status of this species in Britain. It is possible that there is an established population of *M. albomaculatus* in Britain from which this individual came. The obvious place to search for an established population would be in and around the village of Eaton Bray but the specimen may have come from further afield. It is my impression that insects found on the warm, sunlit front wall of the house may be actively flying individuals attracted to a good basking site. It is also possible that the specimen originated from the European continent, was transported to Britain and that this species is not established in Britain.

It is conceivable that *M. albomaculatus* could reach Britain from the continent by natural dispersal flight rather than by human transport. It is noteworthy that there were two records of *M. albomaculatus* from The Netherlands in 2019, the second and third Dutch specimens, in what was a good year for migrant Heteroptera (Berend Aukema *in litt.*, 28 December 2019). In general, specimens found on or near the Channel coasts of Kent and Sussex would be more readily claimed as having arrived by natural flight. Whereas specimens found in the vicinity of ports and cities would be more readily ascribed to human importation. The Eaton Bray occurrence fits neither of these scenarios, being 188 km from the nearest headland of France and from a relatively rural location, remote from any obvious source of importation.

#### Acknowledgements

I would like to thank Jim Flanagan and Tristan Bantock for assistance with the identification of my specimen, and Tristan for confirming that this is the first British record of *M. albomaculatus*.

#### Reference

Péricart, J. 1998. *Hémiptères Lygaeidae Euro-Méditerranéens volume 1*. Généralités, Systématique: Première Partie. Faune de France 84A. Paris: Fédération Française des Sociétés de Sciences Naturelles.



FIGURE 1. Melanocoryphus albomaculatus from Eaton Bray.



FIGURE 2. *Melanocoryphus albomaculatus* from Eaton Bray, showing the red abdominal sternites with black areas at base and apex.

# SOME OLD RECORDS OF LYGAEIDAE (HEMIPTERA) NOT INCLUDED ON THE BRITISH ISLES LIST

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The above record of a new lygaeid in the British Isles (Telfer, 2020) raises the old issue of what is and what is not a valid 'new to Britain'. If the insect is taken in the countryside, even as a single, adult specimen, it is generally accepted as a 'new to Britain'; but if it is found amongst groceries brought home from a supermarket, or plants from a garden centre, it is not accepted as it is considered associated with imported produce. To include the latter encounters as additions to the British Isles list would open the door to many, many foreign species that are occasionally imported here, but which could not (and have not) colonised this country.

But, what about records that occur in gardens, like that of Telfer (2020). Could the bugs have flown there as part of a migration into this country from abroad, making them a valid addition to the British Isles list; or could they be the result of a neighbour's recent visit to a garden centre, and thereby associated with imported produce? An interesting example recently arose in a spreadsheet of records sent me by Keith Fowler (Fowler, 2018). This included a record for the non-British Isles species *Graphosoma lineatum* (Linnaeus) (Pentatomidae) from a garden in Shrewsbury, Shropshire (VC40) in 1990. I queried this and was told that it had come with a plant from a garden centre; and I did not therefore add the record to the Distribution and Atlas (Ryan, 2019). There is a specimen of this species reported in the Dale Collection (Oxford University Museum) labelled 'Catton, Norfolk', without date (Walker, 1933). Catton is now part of urban Norwich, but a century or two ago, it was probably a village or small town. I have also not included this record in the Atlas, as there are insufficient details of the record to clarify the bug's origin.

My inclination is to add records of novel species to the Atlas from outside houses, unless they are known to be associated with imported produce, such as in Telfer (2020); but to exclude records from inside houses, due to the high chance of them having an imported origin, such as in Bantock (2015). This means that if an insect is taken on a kitchen window, it counts as a 'new to Britain' if it is on the outside of the pane, but not if it is on the inside. The thickness of a sheet of glass thereby separates a 'new to Britain' from an imported species. I see no way of avoiding this kind of absurdity, other than to place it elsewhere. If I accept records in houses, how far from groceries should the bugs be to rule out an imported origin? If I discount records from gardens, which would include anything taken in a garden light trap, should I also discount urban areas in general, which are rich sources of records for many species that are definitely British Isles residents?

The reader will no doubt have his own opinion on this issue, and the best I can do is to follow historical precedent as far as possible; and publish full details of records, as far as these are known. In this regard, I list below some records of lygaeids from China (1926), based upon specimens in the Stephensian Collection (British Museum), which I have not added to the Distribution and Atlas. I would be grateful to hear any views on the validity of these records.

Lygaeus (Spilostethus) saxatilis Scop., S. Wales Lygaeus (Spilostethus) albomaculatus Goeze, Bristol [Melanocoryphus albomaculatus of today?] Arocatus melanocephalus F., S. Wales

In the context of the above list, I should perhaps point out that *Spilostethus pandurus* (Scopoli) was recently added to the Atlas based upon a record from East Kent (VC15) (Kaunang, 2016; Ryan, 2017), as it was stated to be 'in the wild' with no reported or suspected association with imported produce.

### References

Bantock, T. 2015. Species new to Britain. *Centrocoris variegatus* Kolenati, 1845 (Coreidae). *Het News* **22**: 2.

China, W. E. 1926. The Stephensian Collection of British Hemiptera. *Entomologist's Monthly Magazine* **62**: 93.

Fowler, K. 2018. Some records of Hemiptera-Heteroptera from Shropshire. Hemipterist 5: 155-157.

Kaunang, J. F. 2016. *Spilostethus pandurus* (Scopoli, 1763) (Hem.: Lygaeidae) recorded for the first time in the wild in Britain. *Entomologist's Record and Journal of Variation* **128**: 152-153.

Ryan, R. P. 2017. The 2016 Hemiptera-Heteroptera county record roundup. *Hemipterist* 4: 127-129.

Ryan, R. P. 2019. The vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. *Hemipterist* **6**: 1-210.

Telfer, M. G. 2020. *Melanocoryphus albomaculatus* (Goeze, 1778) (Heteroptera: Lygaeidae) in Britain. *Hemipterist* 7: 277-278.

Walker, J. J. 1933. The British Hemiptera-Heteroptera of the Dale Collection. *Entomologist's Monthly Magazine* **69**: 234-245.

# NEW VICE-COUNTY RECORDS OF HEMIPTERA-HETEROPTERA FROM DENBIGHSHIRE AND FLINTSHIRE

## **BRYAN FORMSTONE**

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I recently sent an Excel spreadsheet containing 45 records of Hemiptera-Heteroptera to Rob Ryan, who checked them against the Vice-county Distribution and Atlas (Ryan, 2019). The data set was found to contain 9 new vice-county records, which I list below.

Coreus marginatus (Linnaeus) (Coreidae)

VC50: 01/08/2019, SJ327493, Erddig Felin Poulston, sweeping.

Corizus hyoscyami (Linnaeus) (Rhopalidae)

VC50: 08/09/2019, SJ351549, Gresford Garden, on flowers.

Myrmus miriformis (Fallén) (Rhopalidae)

VC50: 03/08/2019, SJ406525, Holt Meadows, sweeping.

Drymus ryeii Douglas & Scott (Lygaeidae)

VC50: 07/01/2019, SJ352553, Maes y pant (South), leaf litter.

Berytinus crassipes (Herrich-Schaeffer) (Berytidae)

VC50: 27/08/2019, SJ338543, Pont y capel, sweeping.

Reduvius personatus (Linnaeus) (Reduviidae)

VC50: 27/05/2019, SJ351549, Gresford House, in bathroom sink.

Charagochilus gyllenhalii (Fallén) (Miridae)

VC50: 02/12/2019, SJ254520, Minera Quarry, in moss.

Pithanus maerkelii (Herrich-Schaeffer) (Miridae)

VC51: 30/06/2019, SJ204704, Halkyn Mountain, sweeping.

Rhabdomiris striatellus (Fabricius) (Miridae)

VC51: 09/06/2019, SJ232689, Northop College, sweeping oak.

I am grateful to Rob for his assistance in identifying the above new records.

# Reference

Ryan, R. P. 2019. The vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. *Hemipterist* **6**: 1-210.

#### SOME REVISIONS TO THE ANNOTATED CHECKLISTS OF AMBIGUOUS SPECIES NAMES

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There are a number of instances in the literature of the British Isles Hemiptera-Heteroptera where a species name has been found to refer to what are now regarded as multiple, separate species. When gathering published records for the County Distribution (Ryan, 2014) and Vice-county Distribution and Atlas (Ryan, 2019), I prepared annotated checklists of these species names (Ryan, 2015, 2016, 2018a, 2018b), in order to document the decisions I took in disregarding some records as ambiguous. During the work towards the Review of Published Records, which begin publication in the present volume of this journal, it was necessary to reconsider the lists of ambiguities, given the broader context in which they now applied. I list below some revisions to the previously published lists.

## Carpocoris mediterraneus Tamanini & Carpocoris purpureipennis (De Geer) (Pentatomidae)

The above two species were identified from British museum specimens, confirming that records for this genus related to more than one species (Bantock, 2014). Alas, no details were given from the labels of the specimens, which might have helped allocate old records to one or other of the two species. I therefore decided at that time, subject to further details being published, to accept modern records for *C. purpureipennis*, but to exclude old ones. As far as I am aware, the situation today remains the same, and my decision on the identity of records for this genus is therefore unchanged. However, I thought it might be useful to list all the records of which I am aware, whether they have been deemed ambiguous or not. These are listed below, with the records deemed to be valid *C. purpureipennis* marked '\*'.

Douglas & Scott (1865). 'Rare. Two specimens taken casually by Mr. J. J. Reading, in Devonshire, and one in the same county by Mr. Saunders'.

Saunders (1892). 'I only know of a few British specimens, all taken in Devonshire, one by the late J. A. Brewer, two recorded by Parfitt, one from Teignmouth, Capt. Blumer, and two from Bickley Woods, Bignell'. [Teignmouth is in VC3. Bickley Woods is apparently near Tiverton, on the VC3/4 boundary. There is a Bickleigh Wood to the north in VC4, but I don't know if this is the same place.] Harwood (1902). 19 August 1901, specimen taken on the north Essex coast [presumably VC19].

China (1026). A graciman in the Stanbangian Collection (Pritish Museum) labelled from Win

China (1926). A specimen in the Stephensian Collection (British Museum) labelled from Windsor [Berkshire, VC22].

Massee (1962). Wye (August 1926). Attracted to light (C. A. W. Duffield). [East Kent, VC15. This could be the origin of the Kent record in Bedwell (1945), which if correct means there has only been one record from Kent, and not two as has been stated in some publications.]

Alexander (2008). 'Isles of Scilly, 1888, JE Mason' and 'Land's End district, JC Dale & Marquand (1884)' [VC1].

\*Barclay & Nau (2001). In a student collection, labelled 'Nettle, Winterbourne, Bristol, 4 October 1995 E. Baldwin', ST6580, VC34.

\*Collins & Nau (2006). 15 October 2005, Portland Bill area, VC9. Sunning on a beach hut.

\*Ryan (2018c), Record from NBN Atlas, Derek Binns, 18 May 2017, TO85751152 [Fairlight, VC14].

## Rhopalus rufus Schilling & Rhopalus parumpunctatus Schilling (Rhopalidae)

The first mention I have found of *R. rufus* occurring in the British Isles is in the joint description with *R. parumpunctatus* by Butler (1923). Butler states that the latter is much the commoner of the two, and there is no indication as to how long the former has been with us. I have not found mention in the literature of specimens of *R. rufus* being found in collections which predate Butler's text. For these reasons, I have not regarded this as a 'species split', necessitating the deletion of all prior records of the latter species unless supported by a specimen. However, I should have highlighted the issue in my annotated lists of ambiguous species names; and I correct this omission by commenting on it now.

## Stictopleurus abutilon (Rossi) & Stictopleurus punctatonervosus (Goeze) (Rhopalidae)

Following the detailed study of museum specimens of Dolling (1978), I have hitherto regarded all previous references to these species as ambiguous (Ryan, 2015); and used Dolling's work as the starting point for the recording of this genus in the British Isles. Having reconsidered the situation, I conclude the following.

- (1) It is probable that over the recorded history of this genus in the British Isles there have only occurred two species, the modern *S. abutilon* and *S. punctatonervosus*. Only these two species were found by Dolling among specimens in museum collections labelled with British Isles locations; and today, following the colonisation of the British Isles by this genus beginning in the 1990s, these are the only two species which have so far been reported.
- (2) Records stated as being of 'abutilon' are the modern *S. abutilon*. There are only two published records I have found for the name 'abutilon' prior to Dolling (1978), as *Corizus abutilon* from Deal and Bournemouth (Champion, 1871; Douglas, 1871). The description of the first of these (Douglas & Scott, 1871) states the important features used today in the separation of *S. abutilon* from *S. punctatonervosus*, specifically the smooth lateral ridge and black-lined 'eyes' of the anterior pronotum present in the former, but not in the latter. Dolling found representative specimens for these two records; and confirmed their identity as *S. abutilon*.
- (3) The records for *Corizus crassicornis* in Douglas & Scott (1865) are ambiguous; and cannot be reliably assigned to either *S. abutilon* or *S. punctatonervosus*. There were many published corrections to the first textbook of the British Isles Heteroptera (Douglas & Scott, 1865) by the authors in the decade following its publication (Ryan, 2018b), but when they described *C. abutilon* as new to the British Isles (Douglas & Scott, 1871), they made no alteration to their entry for *C. crassicornis*. This suggests they considered that the records 'Parley Heath and near Milton, Dorset (Dale)' they gave for *C. crassicornis* did not relate to the new *C. abutilon*, but to a different species (presumably the *S. punctatonervosus* of today). However, Dolling did not find specimens corresponding to these records, even though he consulted the Dale Collection (Oxford). He did find in that collection another Dorset specimen, from Hurn dated 10 October 1822, apparently unknown to Douglas & Scott, which he identified as *S. abutilon*. It is possible that Douglas & Scott's description of *C. crassicornis* was not based upon the missing Dale material, and that these authors assumed that the Dale records they knew related to this species, as they were unaware that *S. abutilon* had already been found in this country. This may not be correct, but I do not feel confident in assigning the Douglas & Scott records to *S. punctatonervosus*, and there is no evidence that they were *S. abutilon*.
- (4) The record given for *C. crassicornis* in Saunders (1875) is *S. punctatonervosus*. At the time of Saunders (1875) there were two clearly separated species on the British Isles list, and Saunders was aware of this situation. Even though he doubted that the two species were distinct, he presented them separately. His stated record for *C. crassicornis* 'Charlwood, Surrey, by sweeping in the autumn, several specimens' is therefore very unlikely to be *S. abutilon*. Dolling found representative specimens for this record and confirmed their identity as *S. punctatonervosus*.
- (5) The conflation of the two species under the single name *C. crassicornis*, in both Saunders (1892) and Butler (1923), confused the identity of records. It is uncertain to which species Saunders' additional records of 'Chobham, Reigate' relate. The statement in Walker (1900) for the Deal sandhills that 'sweeping has produced ... *Corizus crassicornis*', could be a new record for *S. punctatonervosus*, or just be a repeat of the Deal record for *S. abutilon*. The new record for Sussex, without further details, in Butler (1923) is tabulated for *C. crassicornis*; but could relate to either species. The confusion ends with China (1941), where the species are separated again, with the name *C. crassicornis* replaced by *S. punctatonervosus*, and with *C. abutilon* renamed *S. pictus*. The name *S. abutilon* replaces *S. pictus* in Southwood & Leston (1959). Dolling provides a record 'Holm Bush, Sussex, 17 May 1869 (Borrer & James, in Power Collection) (London)' for *S. punctatonervosus* from a specimen, which might be the basis of the Butler addition of Sussex to the county list.
- (6) New records for *S. punctatonervosus* following China (1941) can reasonably be assumed to be the modern species of that name. China (1941) reaffirms the discriminating features for the separation of *S. punctatonervosus* from other members of the genus, so it is once again clear there are two species and how these are to be separated. I am inclined therefore to accept the records of *S. punctatonervosus* for Brockenhurst, New Forest (Webb, 1950) and Essex (Massee, 1955) as being of that species.

- Otherwise the records given by Bedwell (1945), Massee (1954), Massee (1955), Southwood & Leston (1959), Massee (1962) and Groves (1964) add nothing new, and seem to suffer, at least in part, from the confusing conflation of Saunders (1892) and Butler (1923).
- (7) From the foregoing, I regard the published records of Douglas & Scott (1871) and Saunders (1875) as being the first reports in the British Isles of *S. abutilon* and *S. punctatonervosus*, respectively; the records given in Douglas & Scott (1865) being ambiguous. Dolling gives the earliest records based upon specimens as 10 October 1822 and September 1860, respectively.
- (8) There are no vice-county records additional to the Atlas and Distribution (Ryan, 2019), but there is one deletion. The *S. abutilon* record for Dorset (VC9) is based upon Dolling's record for Hurn, but this lies in Watsonian South Hampshire (VC11). However, this confirms the record for the latter vice-county, which is based upon Dolling's Bournemouth record, and which is both too imprecise and too close to the boundary with VC9 to be acceptable for VC11.

#### References

- Alexander, K. N. A. 2008. *The land and freshwater bugs (Hemiptera) of Cornwall & the Isles of Scilly*. CISFBR & ERCCIS Occasional Publication No. 2.
  - [http://www.cisfbr.org.uk/Documents/Cornish%20Hemiptera%20review.pdf]
- Bantock, T. 2014. Carpocoris species in Britain. Het News 21: 5.
- Barclay, M. V. L. & Nau, B. S. 2001. A recent record of *Carpocoris purpureipennis* (De Geer) (Hem., Pentatomidae) from the West of England. *Entomologist's Monthly Magazine* **137**: 72.
- Bedwell, E. C. 1945. The county distribution of the British Hemiptera-Heteroptera. *Entomologist's Monthly Magazine* **81**: 253-273.
- Butler, E. A. 1923. A biology of the British Hemiptera-Heteroptera, H. F. & G. Witherby, London.
- Champion, G. C. 1871. Note on the occurrence in Britain of Corizus Abutilon, Rossi, a species of Hemiptera-Heteroptera new to our lists. *Entomologists' Monthly Magazine* **7**: 208.
- China, W. E. 1926. The Stephensian Collection of British Hemiptera. *Entomologist's Monthly Magazine* **62**: 93.
- China, W. E. 1941. Systematic notes on the British species of *Corizus* auct. Hem., Coreidae). *Entomologists' Monthly Magazine* 77: 273-278.
- Collins, A. R. & Nau, B. S. 2006. The rare British shieldbug *Carpocoris purpureipennis* (DeGeer) (Het.: Pentatomidae) from Portland Bill, Dorset. *Entomologist's Record and Journal of Variation* **118**: 31-33.
- Dolling, W. R. 1978. The British species of *Stictopleurus* Stål (Hemiptera: Rhopalidae). *Entomologist's Gazette* **29**: 261-264.
- Douglas, J. W. 1871. Captures of Hemiptera at Bournemouth, etc. *Entomologists' Monthly Magazine* **8**: 136-137.
- Douglas, J. W. & Scott, J. 1865. British Hemiptera-Heteroptera, Ray Society.
- Douglas, J. W. & Scott, J. 1871. British Hemiptera. Additions and corrections. *Entomologists' Monthly Magazine* **8**: 23-29.
- Groves, E. W. 1964. Hemiptera-Heteroptera of the London Area. Part I. London Naturalist 43: 34-66.
- Harwood, B. S. 1902. *Pentatoma fuscispina* on the North Essex Coast. *Entomologists' Monthly Magazine* **38**: 66.
- Massee, A. M. 1954. The Hemiptera-Heteroptera of Kent. *Transactions of the Society for British Entomology* 11: 245-280.
- Massee, A. M. 1955. The county distribution of the British Hemiptera-Heteroptera, second edition. *Entomologist's Monthly Magazine* **91**: 7-27.
- Massee, A. M. 1962. The Hemiptera-Heteroptera of Kent. II. *Proceedings and Transactions of the South London Entomological and Natural History Society* **1962**: 123-183.
- Ryan, R. P. 2014. The county distribution of the Hemiptera-Heteroptera of the British Isles, fourth edition. *Hemipterist* 1: 38-103.
- Ryan, R. P. 2015. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera since Massee (1955). *Hemipterist* 2: 4-8.
- Ryan, R. P. 2016. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera from Butler (1923) to Massee (1955). *Hemipterist* **3**: 15-17.

- Ryan, R. P. 2018a. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera from Saunders (1892) to Butler (1923). *Hemipterist* 5: 14-15.
- Ryan, R. P. 2018b. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera from Douglas & Scott (1865) to Saunders (1892). *Hemipterist* 5: 114-118.
- Ryan, R. P. 2018c. New vice-county records of Hemiptera-Heteroptera from the NBN Atlas. *Hemipterist* 5: 191-204.
- Ryan, R. P. 2019. The vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. *Hemipterist* **6**: 1-210.
- Saunders, E. 1875. Synopsis of British Hemiptera-Heteroptera. Part I. *Transactions of the Entomological Society of London* **1875**: 117-159.
- Saunders, E. 1892. Hemiptera-Heteroptera of the British Islands. L. Reeve & Co, London.
- Southwood, T. R. E. & Leston, D. 1959. *Land and water bugs of the British Isles*, Frederick Warne & Co. Ltd., London.
- Walker, J. J. 1900. The Coleoptera and Hemiptera of the Deal sandhills. *Entomologists' Monthly Magazine* **36**: 94-101.
- Webb, H. E. 1950. Field Meeting. Brockenhurst. 2<sup>nd</sup> July 1950. *Proceedings and Transactions of the South London Entomological and Natural History Society* **1950-51**: 71-72.

# THE 2019 HEMIPTERA-HETEROPTERA VICE-COUNTY RECORD ROUNDUP

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The vice-county records published in 2019, in journals other than the *Hemipterist*, which are new to the Vice-county Distribution and Atlas (Ryan, 2019), are listed below.

Adomerus biguttatus (Linnaeus) (Cydnidae): East Inverness-shire (VC96) (Ramsay, 2019). Geotomus petiti Wagner (Cydnidae): East Kent (VC15) (Ramsay, 2019). New to the British Isles.

Ramsay (2019) also cited an interesting publication (Murphy, 1901) which I had come across several times in my sojourns through old literature, but from which I had neglected to extract the new vice-county records. This I have now done, and the records that can be unambiguously assigned to a unique modern species and unique vice-county are as follows.

Adomerus biguttatus (Linnaeus) (Cydnidae): Dunbartonshire (VC99)

Pentatoma rufipes (Linnaeus) (Pentatomidae): Dunbartonshire (VC99)

Elasmucha grisea (Linnaeus) (Acanthosomatidae) (as Acanthosoma interstinctum): Dunbartonshire (VC99)

Stygnocoris rusticus (Fallén) (Lygaeidae): Renfrewshire (VC76)

Peritrechus lundii (Gmelin) (Lygaeidae) (as Peritrechus luniger): Ayrshire (VC75)

Scolopostethus decoratus (Hahn) (Lygaeidae): Lanarkshire (VC77) and Dunbartonshire (VC99)

Himacerus apterus (Fabricius) (Nabidae) (as Nabis brevipennis): Renfrewshire (VC76)

Himacerus major (A. Costa) (Nabidae): Renfrewshire (VC76)

Nabis ferus (Linnaeus) (Nabidae): Lanarkshire (VC77) and Dunbartonshire (VC99)

Nabis ericetorum Scholtz (Nabidae): Ayrshire (VC75), Lanarkshire (VC77) and Argyllshire (VC98)

Saldula orthochila (Fieber) (Saldidae): Dunbartonshire (VC99)

Macrosaldula scotica (Curtis) (Saldidae): Lanarkshire (VC77)

Salda littoralis (Linnaeus) (Saldidae): Renfrewshire (VC76) and Dunbartonshire (VC99)

Saldula c-album (Fieber) (Saldidae): Ayrshire (VC75)

Saldula saltatoria (Linnaeus) (Saldidae): Renfrewshire (VC76) and Argyllshire (VC98)

Saldula arenicola (Scholtz) (Saldidae): Renfrewshire (VC76)

Anthocoris nemoralis (Fabricius) (Anthocoridae): Renfrewshire (VC76)

Acompocoris pygmaeus (Fallén) (Anthocoridae): Ayrshire (VC75), Lanarkshire (VC77) and Dunbartonshire (VC99)

Pithanus maerkelii (Herrich-Schaeffer) (Miridae): Renfrewshire (VC76) and Lanarkshire (VC77)

Bryocoris pteridis (Fallén) (Miridae): Lanarkshire (VC77)

Monalocoris filicis (Linnaeus) (Miridae): Lanarkshire (VC77)

*Phytocoris populi* (Linnaeus) (Miridae): Ayrshire (VC75), Lanarkshire (VC77) and Dunbartonshire (VC99)

Phytocoris tiliae (Fabricius) (Miridae): Lanarkshire (VC77) and Dunbartonshire (VC99)

Phytocoris longipennis Flor (Miridae): Ayrshire (VC75) and Dunbartonshire (VC99)

Phytocoris reuteri Saunders (Miridae): Dunbartonshire (VC99)

Phytocoris pini Kirschbaum (Miridae): Renfrewshire (VC76) and Dunbartonshire (VC99)

Phytocoris ulmi (Linnaeus) (Miridae): Ayrshire (VC75) and Dunbartonshire (VC99)

Rhabdomiris striatellus (Fabricius) (Miridae): Dunbartonshire (VC99)

Calocoris roseomaculatus (De Geer) (Miridae): Renfrewshire (VC76)

Lygocoris rugicollis (Fallén) (Miridae): Lanarkshire (VC77)

Neolygus contaminatus (Fallén) (Miridae): Lanarkshire (VC77) and Dunbartonshire (VC99)

Neolygus viridis (Fallén) (Miridae): Dunbartonshire (VC99)

Pinalitus cervinus (Herrich-Schaeffer) (Miridae): Dunbartonshire (VC99)

Pinalitus rubricatus (Fallén) (Miridae): Dunbartonshire (VC99)

Dicyphus pallicornis (Fieber) (Miridae): Renfrewshire (VC76)

Campyloneura virgula (Herrich-Schaeffer) (Miridae): Dunbartonshire (VC99)

Cyllecoris histrionius (Linnaeus) (Miridae): Renfrewshire (VC76)

Orthotylus ericetorum (Fallén) (Miridae): Dunbartonshire (VC99)

Tinicephalus hortulanus (Meyer-Dür) (Miridae): Renfrewshire (VC76)

Harpocera thoracica (Fallén) (Miridae): Ayrshire (VC75) and Dunbartonshire (VC99)

Phylus melanocephalus (Linnaeus) (Miridae): Dunbartonshire (VC99)

Psallus ambiguus (Fallén) (Miridae): Dunbartonshire (VC99)

Psallus varians (Herrich-Schaeffer) (Miridae): Stirlingshire (VC86) and Dunbartonshire (VC99)

Psallus haematodes (Gmelin) (Miridae) (as Psallus sanguineus): Argyllshire (VC98) and Dunbartonshire (VC99)

Ilyocoris cimicoides (Linnaeus) (Naucoridae): Lanarkshire (VC77)

There are also new vice-county records that I have found during my research for the family reviews, as follows.

Lamproplax picea (Flor) (Lygaeidae): East Sussex (VC14) (Side, 1962)

Nysius thymi (Wolff) (Lygaeidae): North-west Yorkshire (VC65) (Flint, 1976)

# References

Flint, J. H. 1976. *Notiophilus aestuans* Motsch. (Col., Carabidae) in Yorkshire. *Entomologist's Monthly Magazine* **112**: 176.

Murphy, J. E. 1901. In Elliot, G. F. S., Laurie, M. & Murdoch, J. B (editors). 1901. *Fauna, flora and geology of the Clyde area*. British Association for the Advancement of Science, Glasgow.

Ramsay, A. J. 2019. A review of Scottish records of *Adomerus biguttatus* (L.) (Hemiptera: Cydnidae) and comments on distribution in Scotland. *British Journal of Entomology and Natural History* **32**: 321-325.

Ryan, R. P. 2019. The vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. *Hemipterist* **6**: 1-210.

Side, K. C. 1962. Notes on some local species of Hemiptera-Heteroptera in Kent. *Entomologist's Monthly Magazine* **98**: 12.

# RECENT RECORDS OF HEMIPTERA-HETEROPTERA FROM CAMBRIDGESHIRE (VC29), HUNTINGDONSHIRE (VC31) AND NORTHAMPTONSHIRE (VC32)

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I began to collate records that I had made in my local area in order to correct the impression from current vice-county distribution maps (Ryan, 2019a) that Huntingdonshire (VC31) is poorly recorded for Heteroptera. In fact, it is quite well-recorded, but few of the records are published and so have escaped inclusion. New impetus was given to this effort by the proposal for a modern distribution atlas (Ryan 2019b). Having a relatively recent cut-off date for records makes comprehensive search for relevant information easier, and since I have been recording in the vice-county for the whole of the modern period defined for this atlas the records I have accumulated will hopefully make a useful contribution. However, Peterborough lies at the junction of three vice-counties, Cambridgeshire (VC29), Huntingdonshire (VC31) and Northamptonshire (VC32), and my local recording effort is spread between the three. I have largely ignored Watsonian boundaries in this area, since modern administrative boundaries are of greater practical value, so a search for records from VC31 became, effectively, a search for records from VC29 and VC32 as well. I have therefore used modern Cambridgeshire as my area of search. This includes the whole of VC29 (Cambridgeshire) and VC31 (Huntingdonshire), together with the northern part of VC32 (Northamptonshire) which falls within the historic Soke of Peterborough.

I have selected a representative record for each species for which I have recent information from each vice-county. For each, I have begun with a spreadsheet of records from a relatively well-recorded and species-rich site, then added data from another site of different character, deleted duplicate species, and continued the process until three successive data sets yielded no additional species. It is possible that this process has missed some species but checking the final list for likely omissions and searching my records for the candidates has so far found none. The records are my own unless otherwise stated: some made by Christopher Kirby-Lambert are included, with his permission, if they come from joint survey work. All the records have been or, in a few cases, will be submitted to the Cambridgeshire and Peterborough Environmental Records Centre (CPERC). Many of the records, in the form submitted to CPERC, include additional information, but have been trimmed to the minimum needed for documentation for current purposes.

The method of selection of representative records inevitably means that a large proportion comes from a small number of sites. To some extent this reflects genuine concentration of recording effort, but for the commoner species there are many other records. A small proportion comes from specific attempts to record the local distribution of Hemiptera, but most are from general surveys undertaken to assess or monitor conservation interest and others are from casual sampling of features of interest without specific target groups in mind. One consequence of this is a bias towards species of open habitats and herbaceous vegetation, and away from those associated with trees and shrubs. This is less apparent in the selection of records provided here than in the larger set from which they were taken. Some nationally common and widely distributed species are missing from one or more of the lists, and they are invariably species associated with woody vegetation.

Because the records included here come from the whole of two vice-counties but from only the northernmost fraction of VC32, the fauna of the latter is likely to be less well represented. The bias is to some extent offset by the fact that I live in VC32, so a rather large proportion of casual records come from there. The Soke of Peterborough, however, contains merely a fraction not only of the vice-county's area but also of its geology, and Northamptonshire is a long county: its southern end no doubt extends into the range of species which do not reach the Soke.

There is a degree of redundancy in the lists as a source of recent vice-county records. Littlewood (2019) has already reported six of the species included here in the list for VC31, for example, and Rowley (2019) lists four species new to VC32, three of which are included here. There is other relevant published information which records included here merely duplicate, so far as vice-county mapping is concerned. However, including all recorded species from each vice-county has been the simplest way

of producing lists with a consistent rationale and without a commitment to exhaustive literature search, and an element of redundancy is preferable to inadvertent omissions.

# Cambridgeshire (VC29)

- *Aneurus avenius* (Dufour) (Aradidae). King's Dyke Nature Reserve, Whittlesey (TL254981), 21-22 July 2018.
- Aneurus laevis (Fabricius) (Aradidae). Wicken Fen NNR (TL5503869412), 29 July-22 August 2013.
- Aradus depressus (Fabricius) (Aradidae). Whitemoor Yard, March (TL41079919), 18-30 May 2008.
- *Acanthosoma haemorrhoidale* (Linnaeus) (Acanthosomatidae). King's Dyke Nature Reserve, Whittlesey (TL254977), 21-22 July 2018.
- Cyphostethus tristriatus (Fabricius) (Acanthosomatidae). Whitemoor Yard, March (TL41609849), 14 July 2014.
- *Elasmostethus interstinctus* (Linnaeus) (Acanthosomatidae). Whitemoor Yard, March (TL415983), 10-11 July 2011.
- *Elasmucha grisea* (Linnaeus) (Acanthosomatidae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- Legnotus limbosus (Geoffroy) (Cydnidae). Whitemoor Yard, March (TL415983), 9 May 2007.
- *Sehirus luctuosus* Mulsant & Rey (Cydnidae). King's Dyke Nature Reserve, Whittlesey (TL248975), 21-22 July 2018.
- Tritomegas bicolor (Linnaeus) (Cydnidae). Whitemoor Yard, March (TL415983), 9 May 2007.
- *Thyreocoris scarabaeoides* (Linnaeus) (Thyreocoridae). King's Dyke Nature Reserve, Whittlesey (TL252981), 21-22 July 2018.
- *Eurygaster testudinaria* (Geoffroy) (Scutelleridae). King's Dyke Nature Reserve, Whittlesey (TL252978), 21-22 July 2018.
- Odontoscelis lineola Rambur (Scutelleridae). Whitemoor Yard, March (TL41139922), 28 May 2012.# *Aelia acuminata* (Linnaeus) (Pentatomidae). King's Dyke Nature Reserve, Whittlesey (TL248977), 21-22 July 2018.
- *Dolycoris baccarum* (Linnaeus) (Pentatomidae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- *Eurydema oleracea* (Linnaeus) (Pentatomidae). King's Dyke Nature Reserve, Whittlesey (TL248975), 21-22 July 2018.
- Eysarcoris venustissimus (Schrank) (Pentatomidae). Whitemoor Yard, March (TL415983), 24 July 2007.
- *Palomena prasina* (Linnaeus) (Pentatomidae). King's Dyke Nature Reserve, Whittlesey (TL248976), 1 June 2013.
- *Pentatoma rufipes* (Linnaeus) (Pentatomidae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- Picromerus bidens (Linnaeus) (Pentatomidae). Whitemoor Yard, March (TL415983), 18 July 2006.
- Piezodorus lituratus (Fabricius) (Pentatomidae). Whitemoor Yard, March (TL415983), 19 July 2005.
- Podops inunctus (Fabricius) (Pentatomidae). Whitemoor Yard, March (TL415983), 23 May 2009.
- Troilus luridus (Fabricius) (Pentatomidae). Whitemoor Yard, March (TL411988), 18-30 May 2008.
- Zicrona caerulea (Linnaeus) (Pentatomidae). Whitemoor Yard, March (TL415983), 19 July 2005.
- Arenocoris fallenii (Schilling) (Coreidae). Whitemoor Yard, March (TL41139922), 27 May 2015.
- Arenocoris waltlii (Herrich-Schaeffer) (Coreidae). Whitemoor Yard, March (TL41519837), 25 May 2012.
- Bathysolen nubilus (Fallén) (Coreidae). Whitemoor Yard, March (TL41289837), 21 May 2015.
- Ceraleptus lividus Stein (Coreidae). Whitemoor Yard, March (TL41609815), 10-11 July 2009.#
- Coreus marginatus (Linnaeus) (Coreidae). Whitemoor Yard, March (TL415983), 18 July 2006.
- *Coriomeris denticulatus* (Scopoli) (Coreidae). King's Dyke Nature Reserve, Whittlesey (TL252978), 21-22 July 2018.
- Gonocerus acuteangulatus (Goeze) (Coreidae). Whitemoor Yard, March (TL41609815), 31 July 2015.
- *Leptoglossus occidentalis* Heidemann (Coreidae). Cambridge University Botanic Garden (TL455572), 8 September 2010.

- Syromastus rhombeus (Linnaeus) (Coreidae). Whitemoor Yard, March (TL41519837), 25 May 2012.#
- Alydus calcaratus (Linnaeus) (Alydidae). Whitemoor Yard, March (TL41609849), 9 May 2007.# Brachycarenus tigrinus (Schilling) (Rhopalidae). Long Road, Comberton (TL39215931), 29 June 2018.#
- *Chorosoma schillingii* (Schilling) (Rhopalidae). King's Dyke Nature Reserve, Whittlesey (TL252978), 21-22 July 2018.
- *Corizus hyoscyami* (Linnaeus) (Rhopalidae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- *Liorhyssus hyalinus* (Fabricius) (Rhopalidae). Whitemoor Yard, March (TL415983), 10-11 July 2009. *Myrmus miriformis* (Fallén) (Rhopalidae). King's Dyke Nature Reserve, Whittlesey (TL248977), 21-22 July 2018.
- *Rhopalus parumpunctatus* Schilling (Rhopalidae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- *Rhopalus rufus* Schilling (Rhopalidae). Wimpole National Trust Estate (TL33594950), 5 July 2019. C. Kirby-Lambert.#.
- *Rhopalus subrufus* (Gmelin) (Rhopalidae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- Stictopleurus abutilon (Rossi) (Rhopalidae). Whitemoor Yard, March (TL415983), 18 July 2006. Stictopleurus punctatonervosus (Goeze) (Rhopalidae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- Acompus rufipes (Wolff) (Lygaeidae). Wicken Fen: Sedge Fen (TL557703), 3 July 2011.
- Arocatus longiceps Stål (Lygaeidae). King's Dyke East, Whittlesey (TL251977), 23 June 2019.
- Chilacis typhae (Perris) (Lygaeidae). Whitemoor Yard, March (TL41519837), 29 July 2015.
- Cymus claviculus (Fallén) (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- *Cymus glandicolor* Hahn (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL252978), 21-22 July 2018.
- *Cymus melanocephalus* Fieber (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Drymus brunneus (R.F. Sahlberg) (Lygaeidae). Whitemoor Yard, March (TL415983), 23 May 2009. Drymus latus Douglas & Scott (Lygaeidae). Magog Down (TL49015315), 17 July 2018.
- Drymus pumilio Puton (Lygaeidae). Wicken Fen NNR (TL558700), 21 August 2012.
- Drymus ryeii Douglas & Scott (Lygaeidae). Whitemoor Yard, March (TL415983), 24-25 May 2011.
- Drymus sylvaticus (Fabricius) (Lygaeidae). Whitemoor Yard, March (TL415983), 23 May 2006.
- Emblethis denticollis Horváth (Lygaeidae). Whitemoor Yard, March (TL41289835), 28 May 2012.
- *Eremocoris podagricus* (Fabricius) (Lygaeidae). Whitemoor Yard, March (TL41419844), 17 September 2014.
- Gastrodes grossipes (De Geer) (Lygaeidae). Cambridge University Botanic Garden (TL455572), 8 September 2010.
- *Graptopeltus lynceus* (Fabricius) (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL248975), 21-22 July 2018.#
- Heterogaster urticae (Fabricius) (Lygaeidae). Whitemoor Yard, March (TL415983), 19 July 2005.
- *Ischnodemus sabuleti* (Fallén) (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Kleidocerys resedae (Panzer) (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24909739), 4 October 2015.
- Megalonotus antennatus (Schilling) (Lygaeidae). Whitemoor Yard, March (TL41289837), 28 May 2012.
- *Megalonotus chiragra* (Fabricius) (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL248975), 21-22 July 2018.
- Megalonotus emarginatus (Rey) (Lygaeidae). Whitemoor Yard, March (TL415983), 23 May 2006. Megalonotus praetextatus (Herrich-Schaeffer) (Lygaeidae). Whitemoor Yard, March (TL41139922), 28 May 2012.

- Megalonotus sabulicola (Thomson) (Lygaeidae). Whitemoor Yard, March (TL413989), 12 July 2003.#
- Nysius cymoides (Spinola) (Lygaeidae). Whitemoor Yard, March (TL41119898), 26 September 2016.#
- *Nysius ericae* (Schilling) (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24909739), 4 October 2015.
- Nysius graminicola (Kolenati) (Lygaeidae). Hardwick (TL36045974), 2 August 2018.#
- *Nysius huttoni* F.B. White (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24909739), 4 October 2015.
- Nysius senecionis (Schilling) (Lygaeidae). Whitemoor Yard, March (TL415983), 19 July 2005.
- Orsillus depressus (Mulsant & Rey) (Lygaeidae). Cambridge University Botanic Garden (TL455572), 12 August 2010.#
- Pachybrachius fracticollis (Schilling) (Lygaeidae). Wicken Fen NNR: Verrall's Fen (TL55307011), 30 June 2019. C. Kirby-Lambert.
- Peritrechus geniculatus (Hahn) (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- Peritrechus lundii (Gmelin) (Lygaeidae). Whitemoor Yard, March (TL41139922), 28 May 2012.
- Peritrechus nubilus (Fallén) (Lygaeidae). Whitemoor Yard, March (TL415983), 9 May 2007.
- Plinthisus brevipennis (Latreille) (Lygaeidae). Cambridge University Botanic Garden (TL455572), 12 July 2011.#
- Raglius alboacuminatus (Goeze) (Lygaeidae). Magog Down (TL48745287), 17 July 2018. C. Kirby-Lambert.#.
- Scolopostethus affinis (Schilling) (Lygaeidae). Whitemoor Yard, March (TL415983), 19 July 2005.
- Scolopostethus grandis Horváth (Lygaeidae). Whitemoor Yard, March (TL41069916), 28 May 2012.
- Scolopostethus puberulus Horváth (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Scolopostethus thomsoni Reuter (Lygaeidae). Whitemoor Yard, March (TL415983), 18 July 2006.
- Stygnocoris fuligineus (Geoffroy) (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- Stygnocoris rusticus (Fallén) (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- Stygnocoris sabulosus (Schilling) (Lygaeidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- *Taphropeltus contractus* (Herrich-Schaeffer) (Lygaeidae). Whitemoor Yard, March (TL415983), 19 July 2005.
- Trapezonotus desertus Seidenstücker (Lygaeidae). Whitemoor Yard, March (TL41139922), 16 July 2014.#
- Berytinus crassipes (Herrich-Schaeffer) (Berytidae). Whitemoor Yard, March (TL415983), 7 May 2008.
- Berytinus minor (Herrich-Schaeffer) (Berytidae). Whitemoor Yard, March (TL415983), 10-11 July 2009.
- *Berytinus montivagus* (Meyer-Dür) (Berytidae). King's Dyke Nature Reserve, Whittlesey (TL24909739), 21-22 July 2018.
- *Berytinus signoreti* (Fieber) (Berytidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- Gampsocoris punctipes (Germar) (Berytidae). Whitemoor Yard, March (TL415983), 18 July 2006. Metatropis rufescens (Herrich-Schaeffer) (Berytidae). Gamlingay Wood SSSI (TL24195430), 30 August 2016.#
- Neides tipularius (Linnaeus) (Berytidae). Cam Washes (TL519667), 21 March 2012.
- Parapiesma quadratum (Fieber) (Piesmatidae). Wicken Fen NNR (TL54856973), 13 May 2013.
- *Piesma maculatum* (Laporte) (Piesmatidae). Cambridge University Botanic Garden (TL455572), 12 July 2011.
- Acalypta carinata (Panzer) (Tingidae). Wimpole National Trust Estate (TL34935193), 29 May-14 June 2019.

- Acalypta parvula (Fallén) (Tingidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- Campylosteira verna (Fallén) (Tingidae). Whitemoor Yard, March (TL41519837), 25 May 2012.# Derephysia foliacea (Fallén) (Tingidae). Whitemoor Yard, March (TL41289835), 29 July 2015.
- Dictyla convergens (Herrich-Schaeffer) (Tingidae). Whitemoor Yard, March (TL41519837), 28 May 2018.
- Dictyonota fuliginosa A. Costa (Tingidae). Whitemoor Yard, March (TL41609815), 31 July 2015.# Dictyonota strichnocera Fieber (Tingidae). Whitemoor Yard, March (TL413989), 5 August 2003.# Kalama tricornis (Schrank) (Tingidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- *Physatocheila dumetorum* (Herrich-Schaeffer) (Tingidae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- *Tingis ampliata* (Herrich-Schaeffer) (Tingidae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- *Tingis cardui* (Linnaeus) (Tingidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- Coranus subapterus (De Geer) (Reduviidae). Whitemoor Yard, March (TL41069916), 27 May 2015.# Empicoris baerensprungi (Dohrn) (Reduviidae). Wenny Road, Chatteris (TL397855), 23 July 2015.# Empicoris culiciformis (De Geer) (Reduviidae). Whitemoor Yard, March (TL41609815), 20 May 2015.
- *Empicoris vagabundus* (Linnaeus) (Reduviidae). Whitemoor Yard, March (TL41119898), 12 July 2018.
- *Himacerus apterus* (Fabricius) (Nabidae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- Himacerus boops (Schiødte) (Nabidae). Wimpole National Trust Estate (TL35265197), 5 July 2019.# Himacerus major (A. Costa) (Nabidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- *Himacerus mirmicoides* (O. Costa) (Nabidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- *Nabis ferus* (Linnaeus) (Nabidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- *Nabis flavomarginatus* Scholtz (Nabidae). King's Dyke Nature Reserve, Whittlesey (TL254979), 21-22 July 2018.
- *Nabis limbatus* Dahlbom (Nabidae). King's Dyke Nature Reserve, Whittlesey (TL253980), 21-22 July 2018.
- Nabis lineatus Dahlbom (Nabidae). Wicken Fen NNR (TL557703), 12 July 2012.
- *Nabis rugosus* (Linnaeus) (Nabidae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- Acompocoris alpinus Reuter (Anthocoridae). Magog Down (TL48765328), 27 June 2018.
- Acompocoris pygmaeus (Fallén) (Anthocoridae). Whitemoor Yard, March (TL41609815), 19 September 2014.
- Anthocoris butleri Le Quesne (Anthocoridae). Cambridge University Botanic Garden (TL455572), 12 August 2010.#
- Anthocoris confusus Reuter (Anthocoridae). King's Dyke Nature Reserve, Whittlesey (TL253980), 21-22 July 2018.
- Anthocoris gallarumulmi (De Geer) (Anthocoridae). Wimpole National Trust Estate (TL34805216), 14 June 2019.
- Anthocoris limbatus Fieber (Anthocoridae). Wicken Fen NNR (TL54996957), 16 July 2013.
- Anthocoris minki Dohrn (Anthocoridae). Whitemoor Yard, March (TL41069916), 18 September 2014.
- Anthocoris nemoralis (Fabricius) (Anthocoridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- Anthocoris nemorum (Linnaeus) (Anthocoridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.

- Anthocoris sarothamni Douglas & Scott (Anthocoridae). Whitemoor Yard, March (TL415983), 24 July 2007.#
- Brachysteles parvicornis (A. Costa) (Anthocoridae). Madingley Road, Coton (TL40685946), 18 May 2018.
- *Buchananiella continua* (F.B. White) (Anthocoridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- Cardiastethus fasciiventris (Garbiglietti) (Anthocoridae). Whitemoor Yard, March (TL411988), 18-30 May 2008.
- *Lyctocoris campestris* (Fabricius) (Anthocoridae). Whitemoor Yard, March (TL41419844), 11 May 2017. C. Kirby-Lambert.
- *Orius horvathi* (Reuter) (Anthocoridae). Whitemoor Yard, March (TL41109911), 12 July 2018. C. Kirby-Lambert.#.
- Orius laevigatus (Fieber) (Anthocoridae). Whitemoor Yard, March (TL411988), 13-17 August 2007.
- Orius laticollis (Reuter) (Anthocoridae). Whitemoor Yard, March (TL41519837), 14 July 2014.
- Orius majusculus (Reuter) (Anthocoridae). Whitemoor Yard, March (TL41069916), 16 July 2014.
- *Orius niger* (Wolff) (Anthocoridae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.
- *Orius vicinus* (Ribaut) (Anthocoridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- Temnostethus gracilis Horváth (Anthocoridae). Whitemoor Yard, March (TL41109911), 30 July 2015.
- *Temnostethus pusillus* (Herrich-Schaeffer) (Anthocoridae). Whitemoor Yard, March (TL411988), 18-30 May 2008.
- Xylocoris cursitans (Fallén) (Anthocoridae). Whitemoor Yard, March (TL41079914), 18-30 May 2008.
- Loricula distinguenda (Reuter) (Microphysidae). Wicken Fen: Verrall's Fen (TL553700), 3 July 2011. Loricula elegantula (Baerensprung) (Microphysidae). Whitemoor Yard, March (TL41109911), 30 July 2015.
- Loricula exilis (Fallén) (Microphysidae). Wicken Fen NNR (TL5499069547), 17 September-30 October 2013.
- Loricula pselaphiformis Curtis (Microphysidae). Whitemoor Yard, March (TL41059900), 31 May 2018.
- *Adelphocoris lineolatus* (Goeze) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- *Agnocoris reclairei* (Wagner) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- Alloeotomus gothicus (Fallén) (Miridae). Cambridge University Botanic Garden (TL455572), 12 July 2011.
- Amblytylus delicatus (Perris) (Miridae). Whitemoor Yard, March (TL41069916), 12 July 2016.# Amblytylus nasutus (Kirschbaum) (Miridae). Whitemoor Yard, March (TL415983), 24 July 2007.
- Apolygus lucorum (Meyer-Dür) (Miridae). Whitemoor Yard, March (TL415983), 19 July 2005.
- *Apolygus spinolae* (Meyer-Dür) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248977), 21-22 July 2018.
- Asciodema obsoleta (Fieber) (Miridae). Whitemoor Yard, March (TL415983), 24 July 2007.
- Atractotomus magnicornis (Fallén) (Miridae). Cambridge University Botanic Garden (TL455572), 15 June 2011.
- Atractotomus mali (Meyer-Dür) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL24909739), 21-22 July 2018.
- Atractotomus parvulus Reuter (Miridae). Adams Road Sanctuary, Cambridge (TL437587), 30 June-25 July 2014.#
- *Blepharidopterus angulatus* (Fallén) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- Blepharidopterus diaphanus (Kirschbaum) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.

- Bryocoris pteridis (Fallén) (Miridae). Cambridge University Botanic Garden (TL455572), 12 August 2010.#
- Calocoris roseomaculatus (De Geer) (Miridae). Whitemoor Yard, March (TL41289835), 29 July 2015.
- Camptozygum aequale (Villers) (Miridae). Magog Down (TL48765328), 27 June 2018.
- Campylomma annulicorne (Signoret) (Miridae). Whitemoor Yard, March (TL411988), 5 August 2003.#
- Campylomma verbasci (Meyer-Dür) (Miridae). Whitemoor Yard, March (TL41139922), 16 July 2014.
- *Campyloneura virgula* (Herrich-Schaeffer) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- Capsus ater (Linnaeus) (Miridae). Whitemoor Yard, March (TL415983), 24 July 2007.
- Capsus wagneri (Remane) (Miridae). Wicken Fen NNR (TL54466956), 16 July 2013.
- *Charagochilus gyllenhalii* (Fallén) (Miridae). Cambridge University Botanic Garden (TL455572), 8 September 2010.
- *Chlamydatus evanescens* (Boheman) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.#
- Chlamydatus saltitans (Fallén) (Miridae). Waterbeach Barracks (TL496672), 6 August 2011.#
- *Closterotomus norwegicus* (Gmelin) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- Compsidolon salicellum (Herrich-Schaeffer) (Miridae). Whitemoor Yard, March (TL41089862), 9 August 2015.#
- Cyllecoris histrionius (Linnaeus) (Miridae). Gamlingay Wood SSSI (TL2385153175), 20 May 2016.
- Cyrtorhinus caricis (Fallén) (Miridae). Whitemoor Yard, March (TL41389924), 14 May 2019.#
- *Deraeocoris flavilinea* (A. Costa) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- *Deraeocoris lutescens* (Schilling) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- *Deraeocoris ruber* (Linnaeus) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL254977), 21-22 July 2018.
- Deraeocoris scutellaris (Fabricius) (Miridae). Wimpole National Trust Estate (TL33915015), 14 June-5 July 2019.
- Dichrooscytus gustavi Josifov (Miridae). Cambridge University Botanic Garden (TL455572), 12 August 2010.
- Dicyphus annulatus (Wolff) (Miridae). Whitemoor Yard, March (TL411988), 13-17 August 2007. Dicyphus epilobii Reuter (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018
- Dicyphus errans (Wolff) (Miridae). Whitemoor Yard, March (TL415983), 19 July 2005.
- Dicyphus escalerae Lindberg (Miridae). Cambridge University Botanic Garden (TL455572), 12 August 2010.#
- Dicyphus globulifer (Fallén) (Miridae). Whitemoor Yard, March (TL415983), 19 July 2005.
- Dicyphus pallicornis (Fieber) (Miridae). Cambridge University Botanic Garden (TL455572), 15 June 2011.#
- Dicyphus pallidus (Herrich-Schaeffer) (Miridae). Gamlingay Wood SSSI (TL24565362), 30 August 2016.#
- Dicyphus stachydis J. Sahlberg (Miridae). Whitemoor Yard, March (TL415983), 23 May 2009.
- Dryophilocoris flavoquadrimaculatus (De Geer) (Miridae). Whitemoor Yard, March (TL411988), 13-17 August 2007.
- Europiella artemisiae (Becker) (Miridae). Cambridge University Botanic Garden (TL455572), 15 June 2011.
- Fieberocapsus flaveolus (Reuter) (Miridae). Whitemoor Yard, March (TL411988), 13-17 August 2007.
- Grypocoris stysi (Wagner) (Miridae). Cambridge University Botanic Garden (TL455572), 15 June 2011
- Halticus luteicollis (Panzer) (Miridae). Whitemoor Yard, March (TL41119898), 12 July 2016.

Harpocera thoracica (Fallén) (Miridae). Whitemoor Yard, March (TL411988), 18-30 May 2008. Heterocordylus tibialis (Hahn) (Miridae). Whitemoor Yard, March (TL415983), 24-25 May 2011.# Heterotoma planicornis (Pallas) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.

Hoplomachus thunbergii (Fallén) (Miridae). Whitemoor Yard, March (TL41609815), 14 July 2016. Hypseloecus visci (Puton) (Miridae). Cambridge University Botanic Garden (TL455572), 15 June 2011.#

Leptopterna dolabrata (Linnaeus) (Miridae). Whitemoor Yard, March (TL415983), 24 July 2007. Leptopterna ferrugata (Fallén) (Miridae). Whitemoor Yard, March (TL415983), 24 July 2007. Liocoris tripustulatus (Fabricius) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.

Lopus decolor (Fallén) (Miridae). Whitemoor Yard, March (TL415983), 18 July 2006. Lygocoris pabulinus (Linnaeus) (Miridae). Whitemoor Yard, March (TL415983), 24 July 2007. Lygocoris rugicollis (Fallén) (Miridae). Whitemoor Yard, March (TL41139922), 31 May 2018. C. Kirby-Lambert.

Lygus maritimus Wagner (Miridae). Whitemoor Yard, March (TL41139922), 28 July 2017. Lygus pratensis (Linnaeus) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.

*Lygus rugulipennis* Poppius (Miridae). King's Dyke Nature Reserve, Whittlesey (TL24859756), 4 October 2015.

Macrolophus pygmaeus (Rambur) (Miridae). Cambridge University Botanic Garden (TL455572), 12 August 2010.#

Macrolophus rubi Woodroffe (Miridae). Fordham Woods (TL632698), 4 June 2002.#

Macrotylus horvathi (Reuter) (Miridae). Whitemoor Yard, March (TL415983), 24 July 2007.#

Macrotylus paykullii (Fallén) (Miridae). Whitemoor Yard, March (TL41609815), 31 July 2015.

Macrotylus solitarius (Meyer-Dür) (Miridae). Whitemoor Yard, March (TL41119898), 16 July 2014.

Malacocoris chlorizans (Panzer) (Miridae). Whitemoor Yard, March (TL41119898), 30 July 2015.

Mecomma ambulans (Fallén) (Miridae). Gamlingay Wood SSSI (TL24115355), 28 June 2016.

Megacoelum infusum (Herrich-Schaeffer) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL253980), 21-22 July 2018.

*Megaloceroea recticornis* (Geoffroy) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL254979), 21-22 July 2018.

Megalocoleus molliculus (Fallén) (Miridae). Whitemoor Yard, March (TL415983), 19 July 2005. Megalocoleus tanaceti (Fallén) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.#

Miris striatus (Linnaeus) (Miridae). Whitemoor Yard, March (TL411988), 18-30 May 2008. Monalocoris filicis (Linnaeus) (Miridae). Adams Road Sanctuary, Cambridge (TL437587), 30 May 2014.#

Neolygus contaminatus (Fallén) (Miridae). Whitemoor Yard, March (TL415983), 18 July 2006. Neolygus populi (Leston) (Miridae). Whitemoor Yard, March (TL41389924), 29 July 2015. Neolygus viridis (Fallén) (Miridae). Whitemoor Yard, March (TL41519837), 29 July 2015. Notostira elongata (Geoffroy) (Miridae). King's Dyke Nature Reserve. Whittlesey (TL248974), 21-

Notostira elongata (Geoffroy) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.

Oncotylus viridiflavus (Goeze) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL253977), 21-22 July 2018.

Orthocephalus coriaceus (Fabricius) (Miridae). Long Road, Comberton (TL39215931), 29 June 2018. Orthocephalus saltator (Hahn) (Miridae). Whitemoor Yard, March (TL415983), 24 July 2007. Orthonotus rufifrons (Fallén) (Miridae). Wicken Fen NNR (TL54866930), 24 June 2013.

Orthops basalis (A. Costa) (Miridae). Stonald Pits, Whittlesey (TL25509795), 28 July 2010.#
Orthops campestris (Linnaeus) (Miridae). King's Dyke Nature Reserve. Whittlesey (TL254977)

*Orthops campestris* (Linnaeus) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL254977), 21-22 July 2018.

Orthops kalmii (Linnaeus) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL254977), 21-22 July 2018.#

Orthotylus adenocarpi (Perris) (Miridae). Whitemoor Yard, March (TL415983), 24 July 2007.# Orthotylus bilineatus (Fallén) (Miridae). Whitemoor Yard, March (TL41069916), 30 July 2015.#

- Orthotylus concolor (Kirschbaum) (Miridae). Whitemoor Yard, March (TL41609815), 26 May 2013. Orthotylus flavinervis (Kirschbaum) (Miridae). West Cambridge Site (TL43105874), 21 June 2018.# Orthotylus flavosparsus (C.R. Sahlberg) (Miridae). Whitemoor Yard, March (TL41169848), 23 July 2012.
- *Orthotylus marginalis* Reuter (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- *Orthotylus nassatus* (Fabricius) (Miridae). Whitemoor Yard, March (TL41419844), 8 July 2019. C. Kirby-Lambert.
- Orthotylus ochrotrichus Fieber (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- Orthotylus prasinus (Fallén) (Miridae). Wenny Road, Chatteris (TL400857), 23 July 2015.
- Orthotylus tenellus (Fallén) (Miridae). Cambridge University Botanic Garden (TL455572), 15 June 2011.
- Orthotylus viridinervis (Kirschbaum) (Miridae). University Sports Ground, Cambridge (TL42815836), 11 July 2018.
- Pantilius tunicatus (Fabricius) (Miridae). Whitemoor Yard, March (TL41119898), 26 September 2016.
- *Phoenicocoris obscurellus* (Fallén) (Miridae). Whitemoor Yard, March (TL41609849), 1 June 2018. C. Kirby-Lambert.
- Phylus coryli (Linnaeus) (Miridae). Whitemoor Yard, March (TL41519837), 5 July 2018.
- *Phylus melanocephalus* (Linnaeus) (Miridae). Gamlingay Wood SSSI (TL2442753583), 28 June 2016.
- *Phytocoris dimidiatus* Kirschbaum (Miridae). Whitemoor Yard, March (TL41069916), 23 July 2013. *Phytocoris longipennis* Flor (Miridae). Whitemoor Yard, March (TL411988), 12 July 2003.
- *Phytocoris populi* (Linnaeus) (Miridae). Adams Road Sanctuary, Cambridge (TL437587), 25 July 2014.
- Phytocoris tiliae (Fabricius) (Miridae). Whitemoor Yard, March (TL41069916), 28 July 2017.
- Phytocoris ulmi (Linnaeus) (Miridae). Whitemoor Yard, March (TL41059900), 21 July 2013.
- *Phytocoris varipes* Boheman (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248977), 21-22 July 2018.
- *Pilophorus cinnamopterus* (Kirschbaum) (Miridae). Whitemoor Yard, March (TL41609815), 19 September 2014.#
- *Pilophorus clavatus* (Linnaeus) (Miridae). Whitemoor Yard, March (TL415983), 18 July 2006.# *Pilophorus perplexus* Douglas & Scott (Miridae). King's Dyke Nature Reserve, Whittlesey (TL253980), 21-22 July 2018.
- *Pinalitus cervinus* (Herrich-Schaeffer) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248974), 21-22 July 2018.
- Pithanus maerkelii (Herrich-Schaeffer) (Miridae). Whitemoor Yard, March (TL415983), 15 July 2008.
- *Plagiognathus arbustorum* (Fabricius) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- *Plagiognathus chrysanthemi* (Wolff) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248973), 21-22 July 2018.
- Polymerus nigrita (Fallén) (Miridae), Whitemoor Yard, March (TL415983), 5 July 2010.
- Polymerus palustris (Reuter) (Miridae). Wicken Fen: Verrall's Fen (TL553700), 3 July 2010.
- Polymerus unifasciatus (Fabricius) (Miridae). Whitemoor Yard, March (TL415983), 5 July 2010.
- Psallus ambiguus (Fallén) (Miridae). Whitemoor Yard, March (TL413989), 15 July 2003.
- Psallus anaemicus Seidenstücker (Miridae). Whitemoor Yard, March (TL41479849), 8 July 2019.#
- Psallus assimilis Stichel (Miridae). Cambridge University Botanic Garden (TL455572), 15 June 2011.
- Psallus betuleti (Fallén) (Miridae). Whitemoor Yard, March (TL411988), 18-30 June 2008.#
- Psallus confusus Rieger (Miridae). Wenny Road, Chatteris (TL398858), 25 June 2015.#
- Psallus falleni Reuter (Miridae). Whitemoor Yard, March (TL411988), 12 July 2003.
- Psallus flavellus Stichel (Miridae). Wenny Road, Chatteris (TL398856), 25 June 2015.
- Psallus haematodes (Gmelin) (Miridae). Whitemoor Yard, March (TL415983), 5 July 2010.
- Psallus helenae Josifov (Miridae). Whitemoor Yard, March (TL41479849), 8 July 2019.#

- Psallus lepidus Fieber (Miridae). Whitemoor Yard, March (TL41519837), 29 July 2015.

  Psallus mollis (Mulsant & Rey) (Miridae). Gamlingay Wood SSSI (TL2453), 16 June 2006.#

  Psallus pardalis Seidenstücker (Miridae). West Cambridge Site (TL43065895), 21 June 2018.#

  Psallus perrisi (Mulsant & Rey) (Miridae). Whitemoor Yard, March (TL411988), 18-30 May 2008.

  Psallus salicis (Kirschbaum) (Miridae). Whitemoor Yard, March (TL41519837), 29 July 2015.

  Psallus variabilis (Fallén) (Miridae). Wimpole National Trust Estate (TL35215240), 25 May 2019.#

  Psallus wagneri Ossiannilsson (Miridae). Wimpole National Trust Estate (TL413989), 15 July 2003.

  Psallus wagneri Ossiannilsson (Miridae). Wimpole National Trust Estate (TL35265197), 25 May 2019.
- Pseudoloxops coccineus (Meyer-Dür) (Miridae). Whitemoor Yard, March (TL41519837), 29 July 2015.
- Rhabdomiris striatellus (Fabricius) (Miridae). King's Dyke East, Whittlesey (TL251980), 22 June 2019.
- Salicarus roseri (Herrich-Schaeffer) (Miridae). Whitemoor Yard, March (TL411988), 5 August 2003. Stenodema calcarata (Fallén) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248976), 4 June 2016
- Stenodema laevigata (Linnaeus) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL25239771), 21 June 2011.
- Stenotus binotatus (Fabricius) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL254979), 21-22 July 2018.
- Sthenarus rotermundi (Scholtz) (Miridae). Chesterton, Cambridge (TL475610), 3 July 2015.
- *Teratocoris antennatus* (Boheman) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL252978), 21-22 July 2018.
- Teratocoris saundersi Douglas & Scott (Miridae). Wicken Fen NNR (TL559700), 9 July 2012.
- *Trigonotylus caelestialium* (Kirkaldy) (Miridae). King's Dyke Nature Reserve, Whittlesey (TL248977), 21-22 July 2018.
- Trigonotylus ruficornis (Geoffroy) (Miridae). Magog Down (TL489528), 27 June 2018.
- Tuponia hippophaes (Fieber) (Miridae). Cambridge University Botanic Garden (TL455572), 15 June 2011.#
- Tytthus pubescens (Knight) (Miridae). Nene Washes SSSI (TL303995), 24 July 2001.
- Tytthus pygmaeus (Zetterstedt) (Miridae). Whitemoor Yard, March (TL415983), 10-11 July 2011.
- *Ceratocombus coleoptratus* (Zetterstedt) (Ceratocombidae). Wicken Fen NNR (TL54456957), 22 August-17 September 2013.
- Chartoscirta cincta (Herrich-Schaeffer) (Saldidae). Stonald Pits, Whittlesey (TL25509795), 9 June 2010
- Chartoscirta elegantula (Fallén) (Saldidae). Wicken Fen NNR (TL557703), 12 July 2012.
- Salda littoralis (Linnaeus) (Saldidae). Fen Drayton Gravel Pits (TL336695), 4 August 2002.
- Saldula opacula (Zetterstedt) (Saldidae). King's Dyke Nature Reserve, Whittlesey (TL252978), 21-22 July 2018.
- Saldula orthochila (Fieber) (Saldidae). Whitemoor Yard, March (TL41609849), 28 September 2016.#
  Saldula pallipes (Fabricius) (Saldidae). King's Dyke Nature Reserve, Whittlesey (TL252978), 21-22
  July 2018.
- Saldula palustris (Douglas) (Saldidae). Foul Anchor (TF465174), 26 August 2012.#
- Saldula saltatoria (Linnaeus) (Saldidae). Star Pit, Whittlesey (TL246968), 31 May 2006.
- *Mesovelia furcata* Mulsant & Rey (Mesoveliidae). King's Dyke Nature Reserve, Whittlesey (TL252978), 21-22 July 2018.
- *Hebrus ruficeps* Thomson (Hebridae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- *Hydrometra stagnorum* (Linnaeus) (Hydrometridae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Microvelia buenoi Drake (Veliidae). Wicken Fen NNR (TL54986928), 30 April 2013.
- Microvelia pygmaea (Dufour) (Veliidae). Wicken Fen NNR (TL54986928), 30 April 2013.
- Microvelia reticulata (Burmeister) (Veliidae). Whitemoor Yard, March (TL41529863), 8-11 April 2003
- Velia caprai Tamanini (Veliidae). Bin Brook, Cambridge (TL43565822), 13 July 2018.

- Aquarius paludum (Fabricius) (Gerridae). Whitemoor Yard, March (TL41059900), 23 May 2017. Gerris argentatus Schummel (Gerridae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Gerris gibbifer Schummel (Gerridae). Gamlingay Wood SSSI (TL24565362), 20 May 2016. Gerris lacustris (Linnaeus) (Gerridae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- *Gerris odontogaster* (Zetterstedt) (Gerridae). King's Dyke Nature Reserve, Whittlesey (TL252978), 21-22 July 2018.
- Gerris thoracicus Schummel (Gerridae). Whitemoor Yard, March (TL41119898), 27 May 2013. Nepa cinerea Linnaeus (Nepidae). Stonald Pits, Whittlesey (TL25449779), 21 September 2010.
- Ranatra linearis (Linnaeus) (Nepidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- *Ilyocoris cimicoides* (Linnaeus) (Naucoridae). Must Farm, Whittlesey (TL23169685), 8 May 2004. *Notonecta glauca* Linnaeus (Notonectidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Notonecta maculata Fabricius (Notonectidae). Whitemoor Yard, March (TL41119898), 26 September 2016.
- Notonecta obliqua Thunberg (Notonectidae). Whitemoor Yard, March (TL41169848), 28 May 2012. Notonecta viridis Delcourt (Notonectidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Plea minutissima Leach (Pleidae). Star Pit, Whittlesey (TL252967), 31 May 2006.
- Arctocorisa germari (Fieber) (Corixidae). Central No. 2 Pit, Whittlesey (TL23449797), 19 May 2013.
- Callicorixa praeusta (Fieber) (Corixidae). Whitemoor Yard, March (TL41529863), 8-11 April 2003.
- Corixa dentipes Thomson (Corixidae). Stanground Gullet (TL21959755), 13 October 2013.
- *Corixa panzeri* Fieber (Corixidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- *Corixa punctata* (Illiger) (Corixidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Cymatia bonsdorffii (C.R. Sahlberg) (Corixidae). Fen Drayton Gravel Pits (TL335689), 14 May 2002. Cymatia coleoptrata (Fabricius) (Corixidae). King's Dyke Nature Reserve, Whittlesey (TL252978), 21-22 July 2018.
- Hesperocorixa linnaei (Fieber) (Corixidae). Whitemoor Yard, March (TL415983), 9 May 2007. Hesperocorixa moesta (Fieber) (Corixidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Hesperocorixa sahlbergi (Fieber) (Corixidae). Whitemoor Yard, March (TL41529863), 8-11 April 2003.
- *Micronecta scholtzi* (Fieber) (Corixidae). Whitemoor Yard, March (TL41389924), 27 May 2013. *Paracorixa concinna* (Fieber) (Corixidae). Whitemoor Yard, March (TL41169848), 18 September 2014.
- Sigara distincta (Fieber) (Corixidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Sigara dorsalis (Leach) (Corixidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Sigara falleni (Fieber) (Corixidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Sigara fossarum (Leach) (Corixidae). King's Dyke Nature Reserve, Whittlesey (TL24909752), 4 October 2015.
- Sigara iactans Jansson (Corixidae). Whitemoor Yard, March (TL41169848), 18 September 2014. Sigara lateralis (Leach) (Corixidae). King's Dyke Nature Reserve, Whittlesey (TL249974), 21-22 July 2018.
- Sigara limitata (Fieber) (Corixidae). King's Dyke Nature Reserve, Whittlesey (TL24319765), 7 October 2010.
- Sigara nigrolineata (Fieber) (Corixidae). Whitemoor Yard, March (TL41169848), 28 May 2012.

# **Huntingdonshire (VC31)**

Aneurus avenius (Dufour) (Aradidae). Conington Sidings (TL20198387), 10 May 2017.
Aneurus laevis (Fabricius) (Aradidae). Holme Fen NNR (TL203890), 6 June 2008.#
Aradus depressus (Fabricius) (Aradidae). Woodwalton Fen NNR (TL229839), 27 May 2002.
Acanthosoma haemorrhoidale (Linnaeus) (Acanthosomatidae). Conington Sidings (TL202833), 11-13 August 2009.

*Cyphostethus tristriatus* (Fabricius) (Acanthosomatidae). Oundle Road car park, Peterborough (TL19199801), 24 June 2015.

*Elasmostethus interstinctus* (Linnaeus) (Acanthosomatidae). Woodwalton Fen NNR (TL229836), 16 May 2002.

Elasmucha grisea (Linnaeus) (Acanthosomatidae). Woodwalton Fen NNR (TL229836), 16 May 2002.

Legnotus limbosus (Geoffroy) (Cydnidae). Conington Sidings (TL20278319), 18 May 2017. Sehirus luctuosus Mulsant & Rey (Cydnidae). Conington Sidings (TL201843), 20 July 2006. Tritomegas bicolor (Linnaeus) (Cydnidae). Conington Sidings (TL20308432), 23 May 2012. Thyreocoris scarabaeoides (Linnaeus) (Thyreocoridae). Conington Sidings (TL20218388), 10 May 2017.

Eurygaster testudinaria (Geoffroy) (Scutelleridae). Conington Sidings (TL20308432), 25 July 2017.# Odontoscelis lineola Rambur (Scutelleridae). Conington Sidings (TL20328318), 15 July 2012.# Aelia acuminata (Linnaeus) (Pentatomidae). Conington Sidings (TL20308432), 10 May 2017. Dolycoris baccarum (Linnaeus) (Pentatomidae). Conington Sidings (TL20218388), 25 July 2017. Eurydema oleracea (Linnaeus) (Pentatomidae), Conington Sidings (TL20218388), 25 July 2017.# Eysarcoris venustissimus (Schrank) (Pentatomidae). Conington Sidings (TL20308432), 24 May 2018. Neottiglossa pusilla (Gmelin) (Pentatomidae). Orton Pit SSSI (TL164946), 3 September 2017.# Palomena prasina (Linnaeus) (Pentatomidae). Conington Sidings (TL20258378), 10 May 2017. Pentatoma rufipes (Linnaeus) (Pentatomidae). Woodwalton Fen NNR (TL234846), 1 June 2002. Picromerus bidens (Linnaeus) (Pentatomidae). Conington Sidings (TL20328318), 23 May 2018. Piezodorus lituratus (Fabricius) (Pentatomidae). Conington Sidings (TL20308432), 25 July 2017. Podops inunctus (Fabricius) (Pentatomidae). Conington Sidings (TL20198338), 18 May 2017. Troilus luridus (Fabricius) (Pentatomidae). Woodwalton Fen NNR (TL229839), 14 July 2002. Zicrona caerulea (Linnaeus) (Pentatomidae). Conington Sidings (TL202841), 2 July 2009. Arenocoris fallenii (Schilling) (Coreidae). Little Paxton Pits SSSI (TL20306425), 29 July 2010.# Arenocoris waltlii (Herrich-Schaeffer) (Coreidae). Conington Sidings (TL20238342), 26 July 2018.# Bathysolen nubilus (Fallén) (Coreidae). Conington Sidings (TL201843), 20 July 2008.# Ceraleptus lividus Stein (Coreidae). Conington Sidings (TL201843), 20 July 2006. Coreus marginatus (Linnaeus) (Coreidae). Conington Sidings (TL20328318), 27 July 2017. Coriomeris denticulatus (Scopoli) (Coreidae). Conington Sidings (TL20308432), 10 May 2017.# Gonocerus acuteangulatus (Goeze) (Coreidae). London Road, Peterborough (TL18129674), 17 August 2018.#

Leptoglossus occidentalis Heidemann (Coreidae). Woodston, Peterborough (TL17879778), 09 July 2017

Syromastus rhombeus (Linnaeus) (Coreidae). Conington Sidings (TL20238342), 18 May 2017.#

Alydus calcaratus (Linnaeus) (Alydidae). Conington Sidings (TL201843), 25 July 2007.#

Brachycarenus tigrinus (Schilling) (Rhopalidae). Produce World, Yaxley (TL191920), 31 July 2009.#

Chorosoma schillingii (Schilling) (Rhopalidae). Conington Sidings (TL20328318), 17 July 2016.

Corizus hyoscyami (Linnaeus) (Rhopalidae). Little Paxton Pits SSSI (TL19866386), 8 August 2010.

Liorhyssus hyalinus (Fabricius) (Rhopalidae). Produce World, Yaxley (TL191920), 31 July 2009.#

Myrmus miriformis (Fallén) (Rhopalidae). Conington Sidings (TL202841), 2 July 2009.

Rhopalus parumpunctatus Schilling (Rhopalidae). Conington Sidings (TL201843), 20 July 2006.#

Rhopalus subrufus (Gmelin) (Rhopalidae). Conington Sidings (TL20198387), 25 July 2017.

Stictopleurus abutilon (Rossi) (Rhopalidae). Conington Sidings (TL20198387), 25 July 2017.#

Stictopleurus punctatonervosus (Goeze) (Rhopalidae). Conington Sidings (TL20308432), 25 July 2017.

Aphanus rolandri (Linnaeus) (Lygaeidae). Holme Fen NNR (TL20428898), 14 August 2014.#

Chilacis typhae (Perris) (Lygaeidae). Woodwalton Fen NNR (TL23048487), 19 July 2002.
Cymus claviculus (Fallén) (Lygaeidae). Conington Sidings (TL20268443), 10 May 2017.
Cymus glandicolor Hahn (Lygaeidae). Conington Sidings (TL20308432), 23 May 2012.
Cymus melanocephalus Fieber (Lygaeidae). Little Paxton Pits SSSI (TL19506248), 2 July 2010.
Drymus brunneus (R.F. Sahlberg) (Lygaeidae). Woodwalton Fen NNR (TL229836), 16 May 2002.
Drymus latus Douglas & Scott (Lygaeidae). Little Paxton Pits SSSI (TL19836390), 29 July-4 September 2010.

Drymus pumilio Puton (Lygaeidae). Conington Sidings (TL202833), 11-13 August 2009.#
Drymus ryeii Douglas & Scott (Lygaeidae). Conington Sidings (TL20258378), 24 May 2012.
Drymus sylvaticus (Fabricius) (Lygaeidae). Conington Sidings (TL20308432), 10 May 2017.
Eremocoris podagricus (Fabricius) (Lygaeidae). Little Paxton Pits SSSI (TL19516243), 17 May-10 June 2010.#

Gastrodes grossipes (De Geer) (Lygaeidae). Woodston, Peterborough (TL17879778), 9 July 2017.# Graptopeltus lynceus (Fabricius) (Lygaeidae). Conington Sidings (TL201843), 20 July 2006.# Heterogaster urticae (Fabricius) (Lygaeidae). Conington Sidings (TL20308432), 10 May 2017. Ischnodemus sabuleti (Fallén) (Lygaeidae). Conington Sidings (TL20198338), 18 May 2017. Kleidocerys resedae (Panzer) (Lygaeidae). Conington Sidings (TL201843), 21 May 2011. Megalonotus antennatus (Schilling) (Lygaeidae). Orton Pit SSSI (TL1694), 15 May 2004. Megalonotus chiragra (Fabricius) (Lygaeidae). Conington Sidings (TL202833), 11-13 August 2009.# Megalonotus emarginatus (Rey) (Lygaeidae). Conington Sidings (TL201843), 10 May 2007.# Megalonotus praetextatus (Herrich-Schaeffer) (Lygaeidae). Conington Sidings (TL201843), 20 July 2006.#

Megalonotus sabulicola (Thomson) (Lygaeidae). Conington Sidings (TL201843), 21 July 2005.# Metopoplax fuscinervis Stål (Lygaeidae). Produce World, Yaxley (TL191920), 31 July 2009.# Nysius cymoides (Spinola) (Lygaeidae). Conington Sidings (TL20218388), 23 September 2016.# Nysius ericae (Schilling) (Lygaeidae). Conington Sidings (TL20218388), 25 July 2017.# Nysius graminicola (Kolenati) (Lygaeidae). Conington Sidings (TL20198387), 26 July 2018.# Nysius huttoni F.B. White (Lygaeidae). Conington Sidings (TL20218388), 25 July 2017.# Nysius senecionis (Schilling) (Lygaeidae). Conington Sidings (TL20218388), 25 July 2017.# Orsillus depressus (Mulsant & Rey) (Lygaeidae). Oundle Road car park, Peterborough (TL19199801), 24 June 2015.#

Peritrechus geniculatus (Hahn) (Lygaeidae). Conington Sidings (TL201843), 10 May 2007.
Peritrechus lundii (Gmelin) (Lygaeidae). Conington Sidings (TL201843), 21 July 2005.
Peritrechus nubilus (Fallén) (Lygaeidae). Conington Sidings (TL201843), 10 May 2007.#
Plinthisus brevipennis (Latreille) (Lygaeidae). Holme Fen NNR (TL204890), 26 April-25 May 2008.#

Scolopostethus affinis (Schilling) (Lygaeidae). Conington Sidings (TL20238342), 18 May 2017. Scolopostethus decoratus (Hahn) (Lygaeidae). Holme Fen NNR (TL204889), 26 October 2013. Scolopostethus grandis Horváth (Lygaeidae). Little Paxton Pits SSSI (TL20286413), 10 June-02 July 2010.#

Scolopostethus puberulus Horváth (Lygaeidae). Conington Sidings (TL20328318), 23 May 2015. Scolopostethus thomsoni Reuter (Lygaeidae). Conington Sidings (TL20258378), 10 May 2017. Stygnocoris fuligineus (Geoffroy) (Lygaeidae). Conington Sidings (TL20238342), 27 July 2017. Stygnocoris rusticus (Fallén) (Lygaeidae). Conington Sidings (TL20238342), 18 July 2014. Stygnocoris sabulosus (Schilling) (Lygaeidae). Conington Sidings (TL20238342), 27 July 2017. Taphropeltus contractus (Herrich-Schaeffer) (Lygaeidae). Conington Sidings (TL202833), 11-13 August 2009.

Trapezonotus desertus Seidenstücker (Lygaeidae). Conington Sidings (TL20198338), 16 May 2019.# Trapezonotus dispar Stål (Lygaeidae). Woodwalton Fen NNR (TL22898368), 14 June-20 July 2002.# Berytinus crassipes (Herrich-Schaeffer) (Berytidae). Conington Sidings (TL20238342), 18 July 2014.#

Berytinus hirticornis (Brullé) (Berytidae). Conington Sidings (TL20138421), 16 July 2019.# Berytinus minor (Herrich-Schaeffer) (Berytidae). Conington Sidings (TL20308432), 10 May 2017. Berytinus montivagus (Meyer-Dür) (Berytidae). Conington Sidings (TL20218388), 25 July 2017.# Berytinus signoreti (Fieber) (Berytidae). Conington Sidings (TL20218388), 25 July 2017.

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Gampsocoris punctipes (Germar) (Berytidae). Conington Sidings (TL20218388), 25 July 2017.# Metatropis rufescens (Herrich-Schaeffer) (Berytidae). Woodwalton Fen NNR (TL22898368), 14 June-20 July 2002.
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*Piesma maculatum* (Laporte) (Piesmatidae). Conington Sidings (TL20328318), 24 May 2012. *Acalypta carinata* (Panzer) (Tingidae). Conington Sidings (TL20328318), 18 July 2014.

Acalypta parvula (Fallén) (Tingidae). Conington Sidings (TL20328318), 10 May 2014.

Campylosteira verna (Fallén) (Tingidae). Conington Sidings (TL201843), 10 May 2007.#

Derephysia foliacea (Fallén) (Tingidae). Conington Sidings (TL20308432), 25 July 2017.

Dictyla convergens (Herrich-Schaeffer) (Tingidae). Woodwalton Fen NNR (TL23048487), 19 July 2002.

Dictyonota fuliginosa A. Costa (Tingidae). Conington Sidings (TL20168444), 16 July 2019.# Kalama tricornis (Schrank) (Tingidae). Conington Sidings (TL202833), 11-13 August 2009.# Physatocheila dumetorum (Herrich-Schaeffer) (Tingidae). Conington Sidings (TL20238342), 27 July 2017.

Tingis ampliata (Herrich-Schaeffer) (Tingidae). Conington Sidings (TL20218388), 25 July 2017.

Tingis cardui (Linnaeus) (Tingidae). Conington Sidings (TL20238342), 18 May 2017.

Coranus subapterus (De Geer) (Reduviidae). Conington Sidings (TL20168444), 22 May 2010.#

Empicoris vagabundus (Linnaeus) (Reduviidae). Produce World, Yaxley (TL191920), 9 August 2010.

Himacerus apterus (Fabricius) (Nabidae). Conington Sidings (TL20308432), 25 July 2013.

Himacerus boops (Schiødte) (Nabidae). Conington Sidings (TL20268443), 16 July 2019.#

Himacerus major (A. Costa) (Nabidae). Conington Sidings (TL201843), 9 July 2011.

Himacerus mirmicoides (O. Costa) (Nabidae). Conington Sidings (TL20308432), 25 July 2017.

Nabis ferus (Linnaeus) (Nabidae). Conington Sidings (TL201843), 21 July 2005.

Nabis flavomarginatus Scholtz (Nabidae). Conington Sidings (TL20268443), 25 July 2017.

Nabis limbatus Dahlbom (Nabidae). Conington Sidings (TL20308432), 25 July 2017.

Nabis rugosus (Linnaeus) (Nabidae). Conington Sidings (TL20278319), 18 May 2017.

Acompocoris pygmaeus (Fallén) (Anthocoridae). Littless Wood, Grafham Water Nature Reserve (TL131678), 18 May 2005.#

Anthocoris amplicollis Horváth (Anthocoridae). Savage's Spinney, Grafham Water Nature Reserve (TL133691), 4 June 2005.#

Anthocoris confusus Reuter (Anthocoridae). Conington Sidings (TL20308432), 24 May 2018.

Anthocoris limbatus Fieber (Anthocoridae). Little Paxton Pits SSSI (TL19666331), 2 July 2010.

Anthocoris nemoralis (Fabricius) (Anthocoridae). Conington Sidings (TL20258378), 10 May 2017.

Anthocoris nemorum (Linnaeus) (Anthocoridae). Conington Sidings (TL20308432), 10 May 2017.

Anthocoris sarothamni Douglas & Scott (Anthocoridae). Conington Sidings (TL20218388), 25 July 2017.#

Anthocoris simulans Reuter (Anthocoridae). Fletton Recreation Ground (TL190978), 10 July 2018.
Buchananiella continua (F.B. White) (Anthocoridae). Conington Sidings (TL20238342), 27 July 2017.#

Cardiastethus fasciiventris (Garbiglietti) (Anthocoridae). Conington Sidings (TL20308432), 10 May 2017.

Dufouriellus ater (Dufour) (Anthocoridae). Woodwalton Fen NNR (TL229839), 16 May 2002.

Lyctocoris campestris (Fabricius) (Anthocoridae). Conington Sidings (TL20308432), 23 May 2012.

Orius laevigatus (Fieber) (Anthocoridae). Conington Sidings (TL20308432), 25 July 2017.

Orius laticollis (Reuter) (Anthocoridae). Conington Sidings (TL20138421), 25 July 2017.#

Orius majusculus (Reuter) (Anthocoridae). Conington Sidings (TL20308432), 24 May 2018.

Orius niger (Wolff) (Anthocoridae). Conington Sidings (TL20218388), 25 July 2017.

Orius vicinus (Ribaut) (Anthocoridae). Conington Sidings (TL20238342), 27 July 2017.#

Temnostethus gracilis Horváth (Anthocoridae). Conington Sidings (TL20328318), 26 July 2018.

Temnostethus pusillus (Herrich-Schaeffer) (Anthocoridae). Woodwalton Fen NNR (TL229839), 14 July 2002.#

*Xylocoris cursitans* (Fallén) (Anthocoridae). Little Paxton Pits SSSI (TL19666331), 4 September 2010.

Xylocoris galactinus (Fieber) (Anthocoridae). Woodwalton Fen NNR (TL22908427), 14 June-20 July 2002.#

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Loricula distinguenda (Reuter) (Microphysidae). Woodwalton Fen NNR (TL228853), 14 July 2002.# Loricula elegantula (Baerensprung) (Microphysidae). Woodwalton Fen NNR (TL234846), 14 July 2002.
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Loricula pselaphiformis Curtis (Microphysidae). Woodwalton Fen NNR (TL229839), 14 July 2002.# Acetropis gimmerthalii (Flor) (Miridae). Woodwalton Fen NNR (TL22878342), 14 July 2002.#

Adelphocoris lineolatus (Goeze) (Miridae). Conington Sidings (TL20218388), 25 July 2017.

Agnocoris reclairei (Wagner) (Miridae). Woodwalton Fen NNR (TL231849), 27 May 2002.

Amblytylus delicatus (Perris) (Miridae). Conington Sidings (TL20218388), 15 July 2016.#

Amblytylus nasutus (Kirschbaum) (Miridae). Conington Sidings (TL202833), 11-13 August 2009.

Apolygus lucorum (Meyer-Dür) (Miridae). Conington Sidings (TL20198338), 25 July 2017.

Apolygus spinolae (Meyer-Dür) (Miridae). Little Paxton Pits SSSI (TL19466248), 2 July 2010.

Asciodema obsoleta (Fieber) (Miridae). Conington Sidings (TL20308432), 2 August 2015.

Atractotomus mali (Meyer-Dür) (Miridae). Conington Sidings (TL20308432), 2 August 2015.

Blepharidopterus angulatus (Fallén) (Miridae). Conington Sidings (TL202833), 11-13 August 2009.

Blepharidopterus diaphanus (Kirschbaum) (Miridae). Little Paxton Pits SSSI (TL19186254), 29 July 2010.#

Brachyarthrum limitatum Fieber (Miridae). Woodwalton Fen NNR (TL227851), 14 July 2002.

Bryocoris pteridis (Fallén) (Miridae). Holme Fen NNR (TL212887), 16 June 2013.

Calocoris roseomaculatus (De Geer) (Miridae). Fletton Lake grassland (TL194960), 14 August 2001.#

Campylomma annulicorne (Signoret) (Miridae). Little Paxton Pits SSSI (TL19666331), 29 July 2010.#

Campylomma verbasci (Meyer-Dür) (Miridae). Conington Sidings (TL202833), 11-13 August 2009.# Campyloneura virgula (Herrich-Schaeffer) (Miridae). Conington Sidings (TL20238342), 17 July 2016.

Capsus ater (Linnaeus) (Miridae). Conington Sidings (TL20238342), 18 May 2017.

Capsus wagneri (Remane) (Miridae). Woodwalton Fen NNR (TL228853), 14 July 2002.

*Charagochilus gyllenhalii* (Fallén) (Miridae). Godmanchester Nature Reserve (TL26027148), 21 July 2015.#

Chlamydatus evanescens (Boheman) (Miridae). Peterborough East Station (TL19749789), 24 June 2015.#

Chlamydatus pullus (Reuter) (Miridae). Conington Sidings (TL202838), 2 July 2009.# Closterotomus fulvomaculatus (De Geer) (Miridae). Woodwalton Fen NNR (TL231849), 08 June 2002.

Closterotomus norwegicus (Gmelin) (Miridae). Conington Sidings (TL20308432), 25 July 2017. Compsidolon salicellum (Herrich-Schaeffer) (Miridae). Conington Sidings (TL20258378), 26 July 2018.

Conostethus venustus (Fieber) (Miridae). Railworld Car Park, Peterborough (TL19029807), 10 August 2017.#

Cyllecoris histrionius (Linnaeus) (Miridae). Woodwalton Fen NNR (TL231849), 1 June 2002.

Cyrtorhinus caricis (Fallén) (Miridae). Woodwalton Fen NNR (TL22638356), 14 July 2002.#

Deraeocoris flavilinea (A. Costa) (Miridae). Conington Sidings (TL201843), 4 July 2010.

Deraeocoris lutescens (Schilling) (Miridae). Conington Sidings (TL20278319), 1 August 2015.

Deraeocoris ruber (Linnaeus) (Miridae). Conington Sidings (TL202841), 11-13 August 2009.

Dicyphus annulatus (Wolff) (Miridae). Conington Sidings (TL20218388), 25 July 2017.

Dicyphus epilobii Reuter (Miridae). Conington Sidings (TL202841), 2 July 2009.

Dicyphus errans (Wolff) (Miridae). Conington Sidings (TL201843), 25 July 2007.

Dicyphus globulifer (Fallén) (Miridae). Conington Sidings (TL20278319), 18 May 2017.

Dicyphus stachydis J. Sahlberg (Miridae). Little Paxton Pits SSSI (TL19666331), 2 July 2010.

Dryophilocoris flavoquadrimaculatus (De Geer) (Miridae). Woodwalton Fen NNR (TL231849), 27 May 2002.

Europiella artemisiae (Becker) (Miridae). Conington Sidings (TL20278319), 26 July 2018.# Fieberocapsus flaveolus (Reuter) (Miridae). Darlow's Farm, Great Fen (TL224855), 26 June 2011. Grypocoris stysi (Wagner) (Miridae). Little Paxton Pits SSSI (TL19866395), 10 June 2010. Halticus luteicollis (Panzer) (Miridae). Conington Sidings (TL20238342), 27 July 2017.#

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Harpocera thoracica (Fallén) (Miridae). Woodwalton Fen NNR (TL231849), 27 May 2002. Heterocordylus tibialis (Hahn) (Miridae). Conington Sidings (TL20308432), 10 May 2017.# Heterotoma planicornis (Pallas) (Miridae). Conington Sidings (TL20308432), 25 July 2017. Leptopterna dolabrata (Linnaeus) (Miridae). Conington Sidings (TL20308432), 10 May 2017. Leptopterna ferrugata (Fallén) (Miridae). Conington Sidings (TL202841), 2 July 2009. Liocoris tripustulatus (Fabricius) (Miridae). Conington Sidings (TL20198387), 25 July 2017. Lopus decolor (Fallén) (Miridae). Conington Sidings (TL201843), 21 July 2005. Lygocoris pabulinus (Linnaeus) (Miridae). Conington Sidings (TL202841), 2 July 2009. Lygocoris rugicollis (Fallén) (Miridae). Sanctuary Bay, Grafham Water Nature Reserve (TL136694), 4 June 2005.
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Lygus maritimus Wagner (Miridae). Conington Sidings (TL20198338), 23 May 2015.#
Lygus pratensis (Linnaeus) (Miridae). Conington Sidings (TL20258378), 25 July 2017.#
Lygus rugulipennis Poppius (Miridae). Conington Sidings (TL20258378), 10 May 2017.
Macrotylus horvathi (Reuter) (Miridae). Conington Sidings (TL20278319), 26 July 2018.#
Macrotylus paykullii (Fallén) (Miridae). Conington Sidings (TL20218388), 25 July 2017.
Macrotylus solitarius (Meyer-Dür) (Miridae). Brampton Wood SSSI (TL179701), 16 July 2001.
Malacocoris chlorizans (Panzer) (Miridae). Conington Sidings (TL20328318), 1 August 2015.
Mecomma ambulans (Fallén) (Miridae). Woodwalton Fen NNR (TL23148402), 14 July 2002.
Megalocoleus molliculus (Fallén) (Miridae). Conington Sidings (TL202841), 2 July 2017.
Megalocoleus tanaceti (Fallén) (Miridae). Conington Sidings (TL20328318), 27 July 2017.
Megalocoleus tanaceti (Fallén) (Miridae). Conington Sidings (TL20258378), 10 May 2017.
Monalocoris filicis (Linnaeus) (Miridae). Woodwalton Fen NNR (TL22868349), 14 June-20 July 2002.

Monosynamma sabulicola (Wagner) (Miridae). Little Paxton Pits SSSI (TL20286413), 2 July 2010.# Neolygus contaminatus (Fallén) (Miridae). Woodwalton Fen NNR (TL229836), 14 July 2002. Neolygus populi (Leston) (Miridae). Little Paxton Pits SSSI (TL19666331), 2 July 2010.# Neolygus viridis (Fallén) (Miridae). Little Paxton Pits SSSI (TL19666331), 2 July 2010. Notostira elongata (Geoffroy) (Miridae). Conington Sidings (TL20218388), 25 July 2017. Oncotylus viridiflavus (Goeze) (Miridae). Conington Sidings (TL20308432), 25 July 2017.# Orthocephalus coriaceus (Fabricius) (Miridae). Fletton Lake grassland (TL194960), 7 August 2001.# Orthocephalus saltator (Hahn) (Miridae). Conington Sidings (TL20268443), 25 July 2017. Orthonotus rufifrons (Fallén) (Miridae). Conington Sidings (TL201843), 9 July 2011. Orthops basalis (A. Costa) (Miridae). Conington Sidings (TL20278319), 27 July 2017.# Orthops campestris (Linnaeus) (Miridae). Conington Sidings (TL20198338), 25 July 2017.# Orthops kalmii (Linnaeus) (Miridae). Conington Sidings (TL20218388), 25 July 2017.# Orthotylus adenocarpi (Perris) (Miridae). Conington Sidings (TL20308432), 2 August 2015.# Orthotylus bilineatus (Fallén) (Miridae). Woodwalton Fen NNR (TL227851), 14 July 2002. Orthotylus concolor (Kirschbaum) (Miridae). Conington Sidings (TL20308432), 16 July 2019.# Orthotylus ericetorum (Fallén) (Miridae). Holme Fen NNR (TL20428898), 14 August 2014. Orthotylus flavinervis (Kirschbaum) (Miridae). Woodwalton Fen NNR (TL229839), 14 July 2002.# Orthotylus flavosparsus (C.R. Sahlberg) (Miridae). Darlow's Farm, Great Fen (TL2253385854), 28 June 2016.

Orthotylus marginalis Reuter (Miridae). Conington Sidings (TL20328318), 15 July 2012. Orthotylus ochrotrichus Fieber (Miridae). Conington Sidings (TL20308432), 17 July 2014. Orthotylus prasinus (Fallén) (Miridae). Gamsey Wood (TL223815), 13 July 2013.# Orthotylus tenellus (Fallén) (Miridae). Woodwalton Fen NNR (TL23048497), 14 July 2002. Phylus coryli (Linnaeus) (Miridae). Savage's Spinney, Grafham Water Nature Reserve (TL133692), 13 June 2005.

Phytocoris dimidiatus Kirschbaum (Miridae). Woodwalton Fen NNR (TL231850), 1 June 2002. Phytocoris dimidiatus Kirschbaum (Miridae). Woodwalton Fen NNR (TL23048497), 14 July 2002. Phytocoris longipennis Flor (Miridae). Woodwalton Fen NNR (TL234846), 14 July 2002. Phytocoris tiliae (Fabricius) (Miridae). Conington Sidings (TL202833), 11-13 August 2009. Phytocoris ulmi (Linnaeus) (Miridae). Conington Sidings (TL202833), 11-13 August 2009. Phytocoris varipes Boheman (Miridae). Conington Sidings (TL20308432), 25 July 2017.

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Pilophorus cinnamopterus (Kirschbaum) (Miridae). Woodston, Peterborough (TL17879778), 9 July 2017.#
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Pilophorus clavatus (Linnaeus) (Miridae). Conington Sidings (TL20328318), 17 July 2016. Pilophorus perplexus Douglas & Scott (Miridae). Conington Sidings (TL20328318), 15 July 2019.# Pinalitus cervinus (Herrich-Schaeffer) (Miridae). Conington Sidings (TL202841), 11-13 August 2009.

Pithanus maerkelii (Herrich-Schaeffer) (Miridae). Holme Fen NNR (TL199894), 15 June 2008. Plagiognathus arbustorum (Fabricius) (Miridae). Conington Sidings (TL20308432), 25 July 2017. Plagiognathus chrysanthemi (Wolff) (Miridae). Conington Sidings (TL20308432), 25 July 2017. Polymerus nigrita (Fallén) (Miridae). Conington Sidings (TL20308432), 15 July 2016. Polymerus palustris (Reuter) (Miridae). Woodwalton Fen NNR (TL228853), 14 July 2002. Polymerus unifasciatus (Fabricius) (Miridae). Conington Sidings (TL20268443), 25 July 2018. Psallus ambiguus (Fallén) (Miridae). Woodwalton Fen NNR (TL229839), 27 May 2002. Psallus assimilis Stichel (Miridae). Savage's Spinney, Grafham Water Nature Reserve (TL133692), 13 June 2005.

Psallus betuleti (Fallén) (Miridae). Woodwalton Fen NNR (TL229836), 27 May 2002.#
Psallus confusus Rieger (Miridae). Woodwalton Fen NNR (TL231850), 27 May 2002.#
Psallus falleni Reuter (Miridae). Conington Sidings (TL20328318), 26 July 2018.
Psallus flavellus Stichel (Miridae). Grafham Water Nature Reserve (TL137672), 26 June 2005.#
Psallus haematodes (Gmelin) (Miridae). Conington Sidings (TL20328318), 27 July 2017.
Psallus lepidus Fieber (Miridae). Little Paxton Pits SSSI (TL19666331), 2 July 2010.
Psallus perrisi (Mulsant & Rey) (Miridae). Woodwalton Fen NNR (TL23048497), 27 May 2002.
Psallus quercus (Kirschbaum) (Miridae). Littless Wood, Grafham Water NR (TL131678), 26 June 2005.

Psallus salicis (Kirschbaum) (Miridae). Ferry Meadows Country Park (TL148976), 17 August 2013.
Psallus varians (Herrich-Schaeffer) (Miridae). Conington Sidings (TL20278319), 23 May 2018.
Psallus wagneri Ossiannilsson (Miridae). Little Paxton Pits SSSI (TL19646248), 4 June 2010.#
Pseudoloxops coccineus (Meyer-Dür) (Miridae). Fletton Recreation Ground (TL190978), 10 July 2018.

Rhabdomiris striatellus (Fabricius) (Miridae). Woodwalton Fen NNR (TL23048497), 27 May 2002. Salicarus roseri (Herrich-Schaeffer) (Miridae). Woodwalton Fen NNR (TL23108396), 14 June-20 July 2002.

Stenodema calcarata (Fallén) (Miridae). Woodwalton Fen NNR (TL23098508), 19 July 2002. Stenodema laevigata (Linnaeus) (Miridae). Woodwalton Fen NNR (TL23028471), 19 July 2002. Stenotus binotatus (Fabricius) (Miridae). Conington Sidings (TL20308432), 25 July 2017. Sthenarus rotermundi (Scholtz) (Miridae). Little Paxton Pits SSSI (TL19666331), 2 July 2010. Teratocoris antennatus (Boheman) (Miridae). Woodwalton Fen NNR (TL23208482), 14 July 2002.# Teratocoris saundersi Douglas & Scott (Miridae). Ferry Meadows Country Park (TL152980), 17 August 2013.#

Trigonotylus caelestialium (Kirkaldy) (Miridae). Conington Sidings (TL20268443), 15 July 2016.# Trigonotylus ruficornis (Geoffroy) (Miridae). Woodwalton Fen NNR (TL233851), 21 July 2012.# Tuponia hippophaes (Fieber) (Miridae). Woodston, Peterborough (TL17879778), 9 July 2017.# Tytthus pubescens (Knight) (Miridae). Little Paxton Pits SSSI (TL19526249), 4 September 2010.# Tytthus pygmaeus (Zetterstedt) (Miridae). Conington Sidings (TL202833), 11-13 August 2009. Ceratocombus coleoptratus (Zetterstedt) (Ceratocombidae). Woodwalton Fen NNR (TL228853), 19 July 2002.#

*Chartoscirta cincta* (Herrich-Schaeffer) (Saldidae). Woodwalton Fen NNR (TL23148402), 13 June 2002.

Salda littoralis (Linnaeus) (Saldidae). Little Paxton Pits SSSI (TL20286413), 2-29 July 2010.
Saldula arenicola (Scholtz) (Saldidae). Little Paxton Pits SSSI (TL20266410), 29 July 2010.#
Saldula opacula (Zetterstedt) (Saldidae). Orton Pit SSSI (TL16039450), 16 September 2012.#
Saldula orthochila (Fieber) (Saldidae). Little Paxton Pits SSSI (TL20276388), 17 May-10 June 2010.#

*Saldula pallipes* (Fabricius) (Saldidae). Orton Pit SSSI (TL16459436), 30 September 2012. *Saldula saltatoria* (Linnaeus) (Saldidae). Conington Sidings (TL20328318), 27 July 2017.

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Mesovelia furcata Mulsant & Rey (Mesoveliidae). Woodwalton Fen NNR (TL23468481), 13 June 2002.
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Hebrus ruficeps Thomson (Hebridae). Holme Fen NNR (TL198984), 15 March 2008. Hydrometra stagnorum (Linnaeus) (Hydrometridae). Woodwalton Fen NNR (TL23448463), 2 May 2002.

Microvelia pygmaea (Dufour) (Veliidae). Orton Pit SSSI (TL15999448), 16 September 2012.# Microvelia reticulata (Burmeister) (Veliidae). Woodwalton Fen (TL23468481), 13 June 2002. Velia caprai Tamanini (Veliidae). Orton Pit SSSI (TL16499327), 26 January 2008. Velia saulii Tamanini (Veliidae). Little Paxton Pits SSSI (TL19186258), 2-29 July 2010.# Aquarius paludum (Fabricius) (Gerridae). Holme Fen NNR (TL2016389473), 13 September 2018. Gerris argentatus Schummel (Gerridae). Woodwalton Fen NNR (TL23138456), 3 May 2002. Gerris lacustris (Linnaeus) (Gerridae). Woodwalton Fen NNR (TL23328571), 3 May 2002. Gerris odontogaster (Zetterstedt) (Gerridae). Woodwalton Fen NNR (TL23448463), 2 May 2002. Gerris thoracicus Schummel (Gerridae). Orton Pit SSSI (TL16419468), 25 July 2009. Nepa cinerea Linnaeus (Nepidae). Woodwalton Fen NNR (TL23328571), 3 May 2002. Ranatra linearis (Linnaeus) (Nepidae). Woodwalton Fen NNR (TL23108325), 5 May 2002. Ilyocoris cimicoides (Linnaeus) (Naucoridae). Woodwalton Fen NNR (TL23328571), 3 May 2002. Notonecta glauca Linnaeus (Notonectidae). Woodwalton Fen NNR (TL22698388), 7 May 2002. Notonecta maculata Fabricius (Notonectidae). Orton Pit SSSI (TL16249427), 19 September 2013. Notonecta obliqua Thunberg (Notonectidae). Orton Pit SSSI (TL16229420), 1 October 2005. Notonecta viridis Delcourt (Notonectidae). Orton Pit SSSI (TL16229420), 1 November 2005. Plea minutissima Leach (Pleidae). Woodwalton Fen NNR (TL23328571), 3 May 2002. Arctocorisa germari (Fieber) (Corixidae). Holme Lode Farm, Great Fen (TL20219040), 3 September

Callicorixa praeusta (Fieber) (Corixidae). Woodwalton Fen NNR (TL23248554), 3 May 2002. Corixa dentipes Thomson (Corixidae). Orton Pit SSSI (TL16119451), 17 September 2012. Corixa panzeri Fieber (Corixidae). Holme Fen NNR (TL2016389473), 16 May 2018. Corixa punctata (Illiger) (Corixidae). Woodwalton Fen NNR (TL23328571), 3 May 2002. Cymatia bonsdorffii (C.R. Sahlberg) (Corixidae). Orton Pit SSSI (TL16219425), 1 January 2006. Cymatia coleoptrata (Fabricius) (Corixidae). Holme Fen NNR (TL2016389473), 16 May 2018. Cymatia rogenhoferi (Fieber) (Corixidae). Hind Mere, Great Fen (TL2044590320), 14 September 2018.#

2011.

Hesperocorixa linnaei (Fieber) (Corixidae). Orton Pit SSSI (TL16219425), 1 November 2005. Hesperocorixa moesta (Fieber) (Corixidae). Orton Pit SSSI (TL16219425), 1 November 2005. Hesperocorixa sahlbergi (Fieber) (Corixidae). Woodwalton Fen NNR (TL23328571), 3 May 2002. Micronecta scholtzi (Fieber) (Corixidae). Woodwalton Fen NNR (TL23108325), 5 May 2002. Paracorixa concinna (Fieber) (Corixidae). Orton Pit SSSI (TL16189455), 29 October 2009. Sigara distincta (Fieber) (Corixidae). Orton Pit SSSI (TL16219425), 1 January 2006. Sigara dorsalis (Leach) (Corixidae). Woodwalton Fen NNR (TL23108325), 5 May 2002. Sigara falleni (Fieber) (Corixidae). Orton Pit SSSI (TL16499310), 11 December 2007. Sigara fossarum (Leach) (Corixidae). Orton Pit SSSI (TL16219425), 1 November 2005. Sigara lateralis (Leach) (Corixidae). Orton Pit SSSI (TL16179444), 18 April 2009. Sigara limitata (Fieber) (Corixidae). Orton Pit SSSI (TL16439479), 25 July 2009. Sigara nigrolineata (Fieber) (Corixidae). Orton Pit SSSI (TL15679450), 26 July 2009.

An additional species deserves mention for the sake of completeness. I have a record of *Dicranocephalus medius* (Mulsant & Rey) (Stenocephalidae) from VC31 (Kingston Park, Peterborough (TL197095672), 4 May 2007). A single individual was swept from species-poor grassland. No possible foodplant was present in the immediate vicinity of the capture, or for as far as could easily be searched in any direction. There have been no records since. The location of capture is a few metres from a substantial road and opposite a business park containing distribution centres which receive considerable traffic. It seems certain that this was an isolated introduction, potentially from far afield, and that inclusion of the species in the vice-county distribution would be misleading. If, however, a population of *D. medius* should be discovered on cultivated spurges in urban Peterborough, the record may require re-evaluation.

# Northamptonshire (VC32)

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Aneurus avenius (Dufour) (Aradidae). Moore Wood (TF11600069), 2 July 2017.
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Aneurus laevis (Fabricius) (Aradidae). Thorpe Park, Peterborough (TL171984), 28 June 2014.

Aradus depressus (Fabricius) (Aradidae). Netherton, Peterborough (TL17169906), 28 April 2010.

Acanthosoma haemorrhoidale (Linnaeus) (Acanthosomatidae). Ailsworth Green Lane (TL12379985), 20 June 2017.

Cyphostethus tristriatus (Fabricius) (Acanthosomatidae). Finchley Green, Peterborough (TL183995), 10 July 2018.#

*Elasmostethus interstinctus* (Linnaeus) (Acanthosomatidae). High Street, Castor (TL12809858), 29 July 2017.

Elasmucha grisea (Linnaeus) (Acanthosomatidae). High Street, Castor (TL12809858), 29 July 2017.

Legnotus limbosus (Geoffroy) (Cydnidae). Thorpe Park, Peterborough (TL174987), 1 June 2019.

Sehirus luctuosus Mulsant & Rey (Cydnidae). Upton Field (TF11150009), 21 June 2017.

Tritomegas bicolor (Linnaeus) (Cydnidae). Sutton Crossways (TL10679884), 31 July 2017.

Eurygaster testudinaria (Geoffroy) (Scutelleridae). Marholm Road Bank (TL13589854), 1 July 2017. *Aelia acuminata* (Linnaeus) (Pentatomidae). Ailsworth Green Lane (TL12379985), 20 June 2017.

Dolycoris baccarum (Linnaeus) (Pentatomidae). Ailsworth Green Lane (TL12379985), 20 June 2017.

Eurydema oleracea (Linnaeus) (Pentatomidae). Footpath north-west of Oldfield Pond (TF12660052), 1 August 2017.

Eysarcoris venustissimus (Schrank) (Pentatomidae). Water Lane, Castor (TL12919851), 29 July 2017. Neottiglossa pusilla (Gmelin) (Pentatomidae). Bainton Heath (TF105068), 23 April 2011.

Palomena prasina (Linnaeus) (Pentatomidae). Ailsworth Green Lane (TL12379985), 20 June 2017.

Pentatoma rufipes (Linnaeus) (Pentatomidae). Ailsworth Green Lane (TL12379985), 20 June 2017.

Picromerus bidens (Linnaeus) (Pentatomidae). Moore Wood (TF11600069), 2 July 2017.

Piezodorus lituratus (Fabricius) (Pentatomidae). Castor Hanglands NNR (TF11760073), 2 July 2017.

Podops inunctus (Fabricius) (Pentatomidae). Upton Field (TF11150009), 30 June 2017.

Troilus luridus (Fabricius) (Pentatomidae). Sutton (TL08639963), 8 July 2018.

Zicrona caerulea (Linnaeus) (Pentatomidae). Sutton Crossways (TL10679884), 31 July 2017.

Arenocoris fallenii (Schilling) (Coreidae). Bainton Heath (TF105068), 23 April 2011.

Bathysolen nubilus (Fallén) (Coreidae). Upton Field (TF11150009), 30 June 2017.#

Ceraleptus lividus Stein (Coreidae). Thorpe Park, Peterborough (TL170984), 1 June 2019.#

Coreus marginatus (Linnaeus) (Coreidae). Castor Hanglands NNR (TF11760073), 2 July 2017.

Coriomeris denticulatus (Scopoli) (Coreidae). Green Lane to White's Spinney (TF12500108), 6 August 2017.

*Gonocerus acuteangulatus* (Goeze) (Coreidae). Bridleway from Ailsworth village to A47 (TL11789940), 31 July 2017.

Leptoglossus occidentalis Heidemann (Coreidae). Finchley Green, Peterborough (TL183995), 10 July 2018.

Syromastus rhombeus (Linnaeus) (Coreidae). Bainton Heath (TF105068), 23 April 2011.# Chorosoma schillingii (Schilling) (Rhopalidae). Etton-Maxey Nature Reserve (TF13520784), 12 August 2015.

Corizus hyoscyami (Linnaeus) (Rhopalidae). Ailsworth Meadow (TL12159914), 29 July 2017. Liorhyssus hyalinus (Fabricius) (Rhopalidae). Etton-Maxey Nature Reserve (TF13810747), 7 June 2015.#

Myrmus miriformis (Fallén) (Rhopalidae). Green Lane to White's Spinney (TF12500108), 6 August 2017.

Rhopalus parumpunctatus Schilling (Rhopalidae). Bainton Heath (TF105068), 23 April 2011.# Rhopalus subrufus (Gmelin) (Rhopalidae). Marholm Road Bank (TL13589854), 1 July 2017. Stictopleurus punctatonervosus (Goeze) (Rhopalidae). Marholm Road Bank (TL13589854), 1 July 2017.

Acompus rufipes (Wolff) (Lygaeidae). Castor Hanglands NNR (TF117020), 3 September 2018. *Chilacis typhae* (Perris) (Lygaeidae). Etton-Maxey Nature Reserve (TF13920779), 7 June 2015.

Cymus claviculus (Fallén) (Lygaeidae). Wildboars Coppice (TF12090076), 2 July 2017.

Cymus glandicolor Hahn (Lygaeidae). Green Lane to White's Spinney (TF12500108), 6 August 2017.

- *Cymus melanocephalus* Fieber (Lygaeidae). Bridleway south of Castor Hanglands to Ailsworth (TL11909990), 21 June 2017.
- *Drymus brunneus* (R.F. Sahlberg) (Lygaeidae). Wildboars Coppice (TF12090076), 20 August-7 September 2017.
- Drymus latus Douglas & Scott (Lygaeidae). Bedford Purlieus NNR (TL036996), 24 August 2007.
- Drymus ryeii Douglas & Scott (Lygaeidae). Castor Hanglands NNR (TF117020), 3 September 2018.
- *Drymus sylvaticus* (Fabricius) (Lygaeidae). Green Lane to White's Spinney (TF12500108), 6-24 August 2017.
- *Eremocoris podagricus* (Fabricius) (Lygaeidae). Bourges Boulevard, Peterborough (TF18380000-TF18180065), 6-27 May 2018.
- Gastrodes grossipes (De Geer) (Lygaeidae). Marholm Road Bank (TL13589854), 1 July 2017. Graptopeltus lynceus (Fabricius) (Lygaeidae). Barnack Hills & Holes NNR (TF075046), 19 July 2015.#
- Heterogaster urticae (Fabricius) (Lygaeidae). Ailsworth Green Lane (TL12379985), 20 June 2017.
- Ischnodemus sabuleti (Fallén) (Lygaeidae). Ailsworth Green Lane (TL12379985), 20 June 2017.
- Kleidocerys resedae (Panzer) (Lygaeidae). High Street, Castor (TL12809858), 29 July 2017.
- Megalonotus antennatus (Schilling) (Lygaeidae). Swaddywell Pit Nature Reserve (TF115036), 10 May 2015.
- Megalonotus chiragra (Fabricius) (Lygaeidae). Upton Field (TF11150009), 30 June 2017.
- Megalonotus emarginatus (Rey) (Lygaeidae). Sutton (TL08189966), 8 July 2018.#
- Megalonotus praetextatus (Herrich-Schaeffer) (Lygaeidae). Westwood, Peterborough (TL17339977), 16 June 2014.#
- Megalonotus sabulicola (Thomson) (Lygaeidae). Dogsthorpe Star Pit SSSI (TF211026), 4 June 2004.Metopoplax ditomoides (A. Costa) (Lygaeidae). Thorpe Park, Peterborough (TL17199843), 1 June 2019.#
- *Nysius ericae* (Schilling) (Lygaeidae). The Range car park, Peterborough (TL207989), 15 February 2015.
- Nysius huttoni F.B. White (Lygaeidae). Castor Hanglands NNR (TF11760073), 2 July 2017.# Nysius senecionis (Schilling) (Lygaeidae). Footpath south of A47, Castor (TL12479917), 29 July 2017.#
- Orsillus depressus (Mulsant & Rey) (Lygaeidae). Thorpe Park, Peterborough (TL174987), 1 June 2019.
- *Peritrechus geniculatus* (Hahn) (Lygaeidae). Bridleway south of Castor Hanglands to Ailsworth (TL11909990), 21 June 2017.
- *Peritrechus lundii* (Gmelin) (Lygaeidae). Bourges Boulevard, Peterborough (TF18380000-TF18180065), 22 April-6 May 2018.
- Peritrechus nubilus (Fallén) (Lygaeidae). Castor Hanglands NNR (TF117020), 3 September 2018. *Plinthisus brevipennis* (Latreille) (Lygaeidae). Thorpe Park, Peterborough (TL172985), 1 June 2019.# *Scolopostethus affinis* (Schilling) (Lygaeidae). Green Lane to White's Spinney (TF12500108), 6 August 2017.
- Scolopostethus grandis Horváth (Lygaeidae). Wildboars Coppice (TF12090076), 20 August-7 September 2017.
- Scolopostethus puberulus Horváth (Lygaeidae). Swaddywell Pit Nature Reserve (TF115036), 10 May 2015.#
- Scolopostethus thomsoni Reuter (Lygaeidae). Ailsworth Green Lane (TL12379985), 20 June 2017. Stygnocoris fuligineus (Geoffroy) (Lygaeidae). Marholm Road verge, Castor (TL13559881), 1 July 2017.
- Stygnocoris rusticus (Fallén) (Lygaeidae). Castor Hanglands NNR (TF117020), 3 September 2018.
- Stygnocoris sabulosus (Schilling) (Lygaeidae). Upton Field (TF11150009), 30 June 2017.
- Taphropeltus contractus (Herrich-Schaeffer) (Lygaeidae). Upton Field (TF11150009), 30 June 2017.#
- Trapezonotus dispar Stål (Lygaeidae). Dogsthorpe Star Pit SSSI (TF210026), 16 May 2004.#
- Berytinus crassipes (Herrich-Schaeffer) (Berytidae). Upton Field (TF11150009), 21 June 2017.
- Berytinus minor (Herrich-Schaeffer) (Berytidae). Castor Hanglands NNR (TF117020), 3 September 2018
- Berytinus montivagus (Meyer-Dür) (Berytidae). Marholm Road Bank (TL13589854), 1 July 2017.

- Berytinus signoreti (Fieber) (Berytidae). Etton-Maxey Nature Reserve (TF13960765), 7 June 2015. Gampsocoris punctipes (Germar) (Berytidae). A47 slip-road verges west of Peterborough (TL13719848), 9 July 2017.
- *Metatropis rufescens* (Herrich-Schaeffer) (Berytidae). Castor Hanglands NNR (TF11930163), 27 June 2010.
- Parapiesma quadratum (Fieber) (Piesmatidae). Etton-Maxey Nature Reserve (TF13740769), 30 June 2015.#
- Acalypta parvula (Fallén) (Tingidae). Marholm Road Bank (TL13589854), 1 July 2017.
- Campylosteira verna (Fallén) (Tingidae). Etton-Maxey Nature Reserve (TF13960765), 12 August 2015.
- Derephysia foliacea (Fallén) (Tingidae). High Street, Castor (TL12809858), 29 July 2017.
- Dictyla convergens (Herrich-Schaeffer) (Tingidae). Thorpe Park, Peterborough (TL17319884), 1 June 2019.
- *Dictyonota fuliginosa* A. Costa (Tingidae). The Grange, Peterborough (TL175993), 16 June 2019.# *Kalama tricornis* (Schrank) (Tingidae). Upton Field (TF11150009), 30 June 2017.
- *Physatocheila dumetorum* (Herrich-Schaeffer) (Tingidae). Bridleway from Ailsworth village to A47 (TL11789940), 31 July 2017.
- Tingis ampliata (Herrich-Schaeffer) (Tingidae). Ailsworth Meadow (TL12159914), 29 July 2017.
- Tingis cardui (Linnaeus) (Tingidae). Water Lane, Castor (TL12919851), 29 July 2017.
- *Empicoris culiciformis* (De Geer) (Reduviidae). The Lido, Peterborough (TL19469841), 7 September 2010.#
- Empicoris vagabundus (Linnaeus) (Reduviidae). Westwood, Peterborough (TL17339977), 25 July 2014.
- Reduvius personatus (Linnaeus) (Reduviidae). Netherton, Peterborough (TL17169906), 28 May 2017. Himacerus apterus (Fabricius) (Nabidae). Ailsworth/Upton parish boundary path (TF11440021), 21 June 2017.
- Himacerus boops (Schiødte) (Nabidae). Swaddywell Pit Nature Reserve (TF117032), 16 June 2015. Himacerus major (A. Costa) (Nabidae). Green Lane to White's Spinney (TF12500108), 6 August 2017.
- Himacerus mirmicoides (O. Costa) (Nabidae). Ailsworth Meadow (TL12159914), 29 July 2017. *Nabis ferus* (Linnaeus) (Nabidae). Footpath north-west of Oldfield Pond (TF12660052), 1 August 2017.
- Nabis flavomarginatus Scholtz (Nabidae). Marholm Road Bank (TL13589854), 1 July 2017. Nabis limbatus Dahlbom (Nabidae). Footpath from Oldfield Pond to White's Spinney (TF12950073), 1 August 2017.
- *Nabis lineatus* Dahlbom (Nabidae). Sutton Heath & Bog SSSI (TF088022), 9 July 2011.# *Nabis rugosus* (Linnaeus) (Nabidae). Castor: west of Cow Lane (TL12529919), 20 June 2017.
- Acompocoris alpinus Reuter (Anthocoridae). Nene Embankment, Peterborough (TL19739804), 4
  August 2017.#
- Anthocoris amplicollis Horváth (Anthocoridae). Bedford Purlieus NNR (TF038000), 28 April 2007.
- Anthocoris confusus Reuter (Anthocoridae). Castor Hanglands NNR (TF11760073), 2 July 2017.
- Anthocoris limbatus Fieber (Anthocoridae). Oldfield Pond (TF13200024), 15 June 2017.
- Anthocoris minki Dohrn (Anthocoridae). The Lido, Peterborough (TL19469841), 20 September 2014.#
- Anthocoris nemoralis (Fabricius) (Anthocoridae). Ailsworth Green Lane (TL12379985), 20 June 2017.
- Anthocoris nemorum (Linnaeus) (Anthocoridae). Ailsworth Green Lane (TL12379985), 20 June 2017. Anthocoris sarothamni Douglas & Scott (Anthocoridae). The Grange, Peterborough (TL175993), 16 June 2019.#
- Anthocoris simulans Reuter (Anthocoridae). Thorpe Wood, Peterborough (TL158983), 15 July-6 August 2005.
- *Brachysteles parvicornis* (A. Costa) (Anthocoridae). Bourges Boulevard, Peterborough (TF18380000-TF18180065), 27 May 2018.#
- *Buchananiella continua* (F.B. White) (Anthocoridae). Ailsworth/Upton parish boundary path (TF11440021), 21 June 2017.#

*Cardiastethus fasciiventris* (Garbiglietti) (Anthocoridae). Ailsworth/Upton parish boundary hedge (TF11570034), 24 June 2017.

*Lyctocoris campestris* (Fabricius) (Anthocoridae). The Lido, Peterborough (TL19469841), 7 September 2010.

Orius horvathi (Reuter) (Anthocoridae). Westwood, Peterborough (TL17339977), 10 July 2014.

Orius laticollis (Reuter) (Anthocoridae). Upton Field (TL11089994), 23 July 2017.

Orius majusculus (Reuter) (Anthocoridae). Clay Lane, Castor (TL12459891), 29 July 2017.

Orius niger (Wolff) (Anthocoridae). Ailsworth Meadow (TL12159914), 29 July 2017.

*Orius vicinus* (Ribaut) (Anthocoridae). Bridleway from Ailsworth village to A47 (TL11789940), 31 July 2017.

Temnostethus gracilis Horváth (Anthocoridae). Castor Hanglands NNR (TF11760073), 2 July 2017.# Temnostethus pusillus (Herrich-Schaeffer) (Anthocoridae). Castor Hanglands NNR (TF11760073), 2 July 2017.

Xylocoris cursitans (Fallén) (Anthocoridae). Oldfield Pond Plantation (TF13090027), 23 June 2017.

Xylocoris galactinus (Fieber) (Anthocoridae). Upton Field (TF11150009), 30 June 2017.#

Loricula elegantula (Baerensprung) (Microphysidae). Ailsworth/Upton parish boundary hedge (TF11570034), 24 June 2017.

Loricula pselaphiformis Curtis (Microphysidae). Chesterton Hill (TL 125947), 18 June 2014.

Adelphocoris lineolatus (Goeze) (Miridae). Ailsworth Meadow (TL12159914), 29 July 2017.

Agnocoris reclairei (Wagner) (Miridae). Upton Field (TL11089994), 23 July 2017.#

Alloeotomus gothicus (Fallén) (Miridae). Bainton Heath (TF105068), 28 July 2011.#

*Amblytylus nasutus* (Kirschbaum) (Miridae). Ailsworth: field east of Ponds Plantation (TF11340020), 21 June 2017.

Apolygus lucorum (Meyer-Dür) (Miridae). Sutton (TL07919960), 8 July 2018.

Apolygus spinolae (Meyer-Dür) (Miridae). Bridleway from Ailsworth village to A47 (TL11789940), 31 July 2017.

Asciodema obsoleta (Fieber) (Miridae). The Grange, Peterborough (TL175993), 16 June 2019.

Atractotomus magnicornis (Fallén) (Miridae). Wildboars Coppice (TF12090076), 24 June 2017.

Atractotomus mali (Meyer-Dür) (Miridae). Ailsworth Green Lane (TL12379985), 20 June 2017.

Atractotomus parvulus Reuter (Miridae). Marholm Road Bank (TL13589854), 1 July 2017.#

Blepharidopterus angulatus (Fallén) (Miridae). High Street, Castor (TL12809858), 29 July 2017. Blepharidopterus diaphanus (Kirschbaum) (Miridae). Etton-Maxey Nature Reserve (TF13880753), 12 August 2015.#

Brachyarthrum limitatum Fieber (Miridae). Wildboars Coppice (TF12090076), 2 July 2017.# Brachynotocoris puncticornis Reuter (Miridae). Thorpe Park, Peterborough (TL171988), 29 July 2014.#

*Calocoris roseomaculatus* (De Geer) (Miridae). Bridleway south of Castor Hanglands to Ailsworth (TL11909990), 21 June 2017.

Camptozygum aequale (Villers) (Miridae). Bluebell Wood (TL14649854), 6 August 2014.#
Campylomma annulicorne (Signoret) (Miridae). Etton-Maxey Nature Reserve (TF13880753), 12
August 2015.#

Campylomma verbasci (Meyer-Dür) (Miridae). Peterborough railway station (TL18599928), 29 July 2017.#

Campyloneura virgula (Herrich-Schaeffer) (Miridae). Ailsworth/Upton parish boundary hedge (TF11570034), 24 June 2017.

Capsus ater (Linnaeus) (Miridae). Marholm Road Bank (TL13589854), 1 July 2017.

Charagochilus gyllenhalii (Fallén) (Miridae). Helpston Road verge, Ailsworth (TF12420086), 1 August 2017.

Chlamydatus pullus (Reuter) (Miridae). Swaddywell Pit Nature Reserve (TF11630325), 16 June 2015.#

*Chlamydatus saltitans* (Fallén) (Miridae). Bourges Boulevard, Peterborough (TF18380000-TF18180065), 27 May-28 June 2018.

Closterotomus fulvomaculatus (De Geer) (Miridae). Castor Hanglands NNR (TF11760073), 2 July 2017.

Closterotomus norwegicus (Gmelin) (Miridae). Ailsworth paddock (TL12169900), 29 July 2017.

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Closterotomus trivialis (A. Costa) (Miridae). Ailsworth Green Lane (TL12379985), 20 June 2017.# Compsidolon salicellum (Herrich-Schaeffer) (Miridae). Clay Lane, Castor (TL12459891), 29 July 2017.
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Cyllecoris histrionius (Linnaeus) (Miridae). Sutton (TL086996), 11 June 2018.

Deraeocoris flavilinea (A. Costa) (Miridae). Ailsworth Green Lane (TL12379985), 20 June 2017.

*Deraeocoris lutescens* (Schilling) (Miridae). Bridleway from Ailsworth village to A47 (TL11789940), 31 July 2017.

Deraeocoris ruber (Linnaeus) (Miridae). Ailsworth Green Lane (TL12379985), 20 June 2017. Deraeocoris scutellaris (Fabricius) (Miridae). Castor Hanglands NNR (TF117020), 15 May 2018. Dicyphus annulatus (Wolff) (Miridae). A47 slip-road verges west of Peterborough (TL13719848), 9 July 2017.

*Dicyphus epilobii* Reuter (Miridae). Bridleway from Ailsworth village to A47 (TL11789940), 31 July 2017.

Dicyphus errans (Wolff) (Miridae). Wildboars Coppice (TF12090076), 2 July 2017.

Dicyphus escalerae Lindberg (Miridae). Royce Road, Peterborough (TL20819929), 17 September 2017.#

Dicyphus globulifer (Fallén) (Miridae). Boongate verge, Peterborough (TL20569899), 16 July 2017. Dicyphus pallidus (Herrich-Schaeffer) (Miridae). Clay Lane, Castor (TL12459891), 29 July 2017.# Dicyphus stachydis J. Sahlberg (Miridae). Clay Lane, Castor (TL12459891), 29 July 2017.

Dryophilocoris flavoquadrimaculatus (De Geer) (Miridae). Sutton (TL08639963), 11 June 2018.

Europiella artemisiae (Becker) (Miridae). Sutton (TL07919960), 8 July 2018.

Fieberocapsus flaveolus (Reuter) (Miridae). Oldfield Pond (TF13200024), 23 June 2017.#

Grypocoris stysi (Wagner) (Miridae). Oldfield Pond Plantation (TF13090027), 15 June 2017.

Halticus apterus (Linnaeus) (Miridae). Wansford Pasture SSSI (TL069994), 31 July 2004.#

Halticus luteicollis (Panzer) (Miridae). Clay Lane, Castor (TL12459891), 29 July 2017.#

Harpocera thoracica (Fallén) (Miridae). Sutton (TL99049952), 11 June 2018.

Heterocordylus tibialis (Hahn) (Miridae). The Grange, Peterborough (TL175993), 16 June 2019.# Heterotoma planicornis (Pallas) (Miridae). Ailsworth/Upton parish boundary hedge (TF11570034), 24 June 2017.

Hoplomachus thunbergii (Fallén) (Miridae). A47 Soke Parkway bank, Peterborough (TL15699864), 7 June 2017.

*Leptopterna dolabrata* (Linnaeus) (Miridae). Ailsworth: field east of Ponds Plantation (TF11340020), 21 June 2017.

Leptopterna ferrugata (Fallén) (Miridae). Arable margin to north of A47 (TL12189944), 20 June 2017

Liocoris tripustulatus (Fabricius) (Miridae). Ailsworth Green Lane (TL12379985), 20 June 2017.

Lopus decolor (Fallén) (Miridae). Oldfield Pond (TF13200024), 23 June 2017.

Lygocoris pabulinus (Linnaeus) (Miridae). Ailsworth Green Lane (TL12379985), 20 June 2017.

Lygus maritimus Wagner (Miridae). Potters Way, Peterborough (TL19979819), 16 July 2017.#

Lygus pratensis (Linnaeus) (Miridae). Ailsworth Meadow (TL12159914), 29 July 2017.#

Lygus rugulipennis Poppius (Miridae). Ailsworth Meadow (TL12159914), 29 July 2017.

Macrolophus pygmaeus (Rambur) (Miridae). Wildboars Coppice (TF12090076), 2 July 2017.

Macrolophus rubi Woodroffe (Miridae), Southorpe Paddock SSSI (TF084021), 17 July 2004.#

Macrotylus horvathi (Reuter) (Miridae). Ailsworth Meadow (TL12159914), 29 July 2017.#

*Macrotylus paykullii* (Fallén) (Miridae). A47 slip-road verges west of Peterborough (TL13719848), 9 July 2017.

*Malacocoris chlorizans* (Panzer) (Miridae). Bridleway from Ailsworth village to A47 (TL11789940), 31 July 2017.

Mecomma dispar (Boheman) (Miridae). Sutton Heath & Bog SSSI (TF088022), 9 July 2011.# Megacoelum infusum (Herrich-Schaeffer) (Miridae). Thorpe Park, Peterborough (TL171984), 28 June 2014

*Megaloceroea recticornis* (Geoffroy) (Miridae). Ailsworth: field east of Ponds Plantation (TF11340020), 21 June 2017.

Megalocoleus molliculus (Fallén) (Miridae). Moore Wood (TF11600069), 20 August 2017. Megalocoleus tanaceti (Fallén) (Miridae). Ailsworth (TL108976), 29 July 2011.

*Neolygus contaminatus* (Fallén) (Miridae). Castor Hanglands NNR (TF11760073), 2 July 2017. *Neolygus populi* (Leston) (Miridae). Thorpe Park, Peterborough (TL171984), 28 June 2014.

Neolygus viridis (Fallén) (Miridae). Footpath from Church Walk to Ponds Plantation (TF10990027),

Miris striatus (Linnaeus) (Miridae). Sutton (TL086996), 11 June 2018.

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30 June 2017.
Notostira elongata (Geoffroy) (Miridae). Ailsworth Meadow (TL12159914), 29 July 2017.
Oncotylus viridiflavus (Goeze) (Miridae). Ailsworth Meadow (TL12159914), 29 July 2017.
Orthocephalus coriaceus (Fabricius) (Miridae). Footpath from Salter's Tree to Ailsworth Green Lane
   (TF12750013), 20 June 2017.
Orthocephalus saltator (Hahn) (Miridae). Footpath south of A47, Castor (TL12479917), 29 July
   2017.
Orthonotus rufifrons (Fallén) (Miridae). Castor Hanglands NNR (TF11760073), 2 July 2017.
Orthops basalis (A. Costa) (Miridae). Moore Wood (TF11600069), 2 July 2017.#
Orthops campestris (Linnaeus) (Miridae). Ailsworth Green Lane (TL12379985), 20 June 2017.
Orthops kalmii (Linnaeus) (Miridae). Bridleway south of Castor Hanglands to Ailsworth
   (TL11909990), 21 June 2017.#
Orthotylus flavinervis (Kirschbaum) (Miridae), Netherton, Peterborough (TL17169906), 21 June
   2017.#
Orthotylus flavosparsus (C.R. Sahlberg) (Miridae). Potters Way, Peterborough (TL19979819), 16
   July 2017.
Orthotylus marginalis Reuter (Miridae). Cow Lane, Castor (TL12839943), 20 June 2017.
Orthotylus nassatus (Fabricius) (Miridae). Thorpe Park, Peterborough (TL171984), 28 June 2014.#
Orthotylus ochrotrichus Fieber (Miridae), Clay Lane, Castor (TL12459891), 29 July 2017.
Orthotylus tenellus (Fallén) (Miridae). Green Lane to White's Spinney (TF12500108), 1 August 2017.
Pantilius tunicatus (Fabricius) (Miridae). Moore Wood (TF11600069), 7 September 2017.
Parapsallus vitellinus (Scholtz) (Miridae). Wildboars Coppice (TF12090076), 24 June 2017.#
Phoenicocoris obscurellus (Fallén) (Miridae). Bainton Heath (TF105068), 28 July 2011.
Phylus coryli (Linnaeus) (Miridae). Castor Hanglands NNR (TF11760073), 2 July 2017.
Phylus melanocephalus (Linnaeus) (Miridae). Oldfield Pond Plantation (TF13090027), 23 June 2017.
Phytocoris dimidiatus Kirschbaum (Miridae). Moore Wood (TF11600069), 20 August 2017.
Phytocoris longipennis Flor (Miridae). Castor Hanglands NNR (TF11760073), 2 July 2017.
Phytocoris tiliae (Fabricius) (Miridae). Oldfield Pond Plantation (TF13090027), 1 August 2017.
Phytocoris ulmi (Linnaeus) (Miridae). Castor Hanglands NNR (TF11760073), 2 July 2017.
Phytocoris varipes Boheman (Miridae). Ailsworth Meadow (TL12159914), 29 July 2017.
Pilophorus cinnamopterus (Kirschbaum) (Miridae). Netherton, Peterborough (TL17169906), 6 July
   2017.
Pilophorus clavatus (Linnaeus) (Miridae). Upton Field (TL11089994), 23 July 2017.
Pilophorus perplexus Douglas & Scott (Miridae). Clay Lane, Castor (TL12459891), 29 July 2017.
Pinalitus cervinus (Herrich-Schaeffer) (Miridae). Clay Lane, Castor (TL12459891), 29 July 2017.
Pithanus maerkelii (Herrich-Schaeffer) (Miridae). Bridleway south of Castor Hanglands to Ailsworth
   (TL11909990), 21 June 2017.
Plagiognathus arbustorum (Fabricius) (Miridae). Ailsworth Meadow (TL12159914), 29 July 2017.
Plagiognathus chrysanthemi (Wolff) (Miridae). Ailsworth Green Lane (TL12379985), 20 June 2017.
Plesiodema pinetella (Zetterstedt) (Miridae). Marholm Road Bank (TL13589854), 1 July 2017.
Polymerus nigrita (Fallén) (Miridae). Barnack Hills & Holes NNR (TF075046), 19 July 2015.
Polymerus palustris (Reuter) (Miridae). Netherton, Peterborough (TL17169906), 5 July 2017.#
Polymerus unifasciatus (Fabricius) (Miridae). Marholm Road Bank (TL13589854), 1 July 2017.
Psallus ambiguus (Fallén) (Miridae). Etton-Maxey Nature Reserve (TF13740769), 30 June 2015.
Psallus anaemicus Seidenstücker (Miridae). Thorpe Park, Peterborough (TL171984), 28 June 2014.
Psallus assimilis Stichel (Miridae), Ailsworth/Upton parish boundary path (TF11440021), 21 June
Psallus confusus Rieger (Miridae). Thorpe Park, Peterborough (TL170983), 12 June 2014.#
Psallus falleni Reuter (Miridae). High Street, Castor (TL12809858), 29 July 2017.#
Psallus flavellus Stichel (Miridae). Castor Hanglands NNR (TF11760073), 2 July 2017.#
Psallus haematodes (Gmelin) (Miridae). Oldfield Pond Plantation (TF13090027), 1 August 2017.
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- Psallus helenae Josifov (Miridae). Thorpe Park, Peterborough (TL170983), 12 June 2014.Psallus lepidus Fieber (Miridae). Footpath from Salter's Tree to Oldfield Pond (TF13620017), 23 June 2017.
- *Psallus perrisi* (Mulsant & Rey) (Miridae). Spinney south of Castor Hanglands NNR (TF11860050), 24 June 2017.
- *Psallus salicis* (Kirschbaum) (Miridae). Southorpe Brook springs (TF06540284), 15 June 2018.# *Psallus varians* (Herrich-Schaeffer) (Miridae). Castor Hanglands NNR (TF11760073), 2 July 2017.
- *Pseudoloxops coccineus* (Meyer-Dür) (Miridae). Footpath from Salter's Tree to Oldfield Pond (TF13620017), 23 June 2017.
- Reuteria marqueti Puton (Miridae). Thorpe Park, Peterborough (TL171986), 30 July 2014.

Rhabdomiris striatellus (Fabricius) (Miridae). Sutton (TL08639963), 11 June 2018.

- Salicarus roseri (Herrich-Schaeffer) (Miridae). Electricity Cut, Peterborough (TL18479819), 28 July 2015.
- Stenodema calcarata (Fallén) (Miridae). Castor Hanglands NNR (TF11760073), 2 July 2017.
- Stenodema laevigata (Linnaeus) (Miridae). Castor Hanglands NNR (TF11760073), 2 July 2017.
- Stenotus binotatus (Fabricius) (Miridae). Ailsworth paddock (TL12169900), 29 July 2017.
- Sthenarus rotermundi (Scholtz) (Miridae). Thorpe Park, Peterborough (TL171988), 12 June 2014.
- *Teratocoris antennatus* (Boheman) (Miridae). Etton-Maxey Nature Reserve (TF13740769), 7 June 2015.#
- *Teratocoris saundersi* Douglas & Scott (Miridae). Netherton, Peterborough (TL17169906), 19 June 2017.#
- *Tinicephalus hortulanus* (Meyer-Dür) (Miridae). Barnack Hills & Holes NNR (TF075046), 19 July 2015.
- Trigonotylus caelestialium (Kirkaldy) (Miridae). Ailsworth paddock (TL12169900), 29 July 2017. Trigonotylus ruficornis (Geoffroy) (Miridae). Helpston Road verge, Ailsworth (TF12420086), 1 August 2017.#
- Tytthus pygmaeus (Zetterstedt) (Miridae). Oldfield Pond Plantation (TF13090027), 23 June 2017. Ceratocombus coleoptratus (Zetterstedt) (Ceratocombidae). Oldfield Pond (TF13200024), 23 June 2017.
- Chartoscirta cincta (Herrich-Schaeffer) (Saldidae). Castor Hanglands NNR (TF1176800752), 2 May 2017.
- Salda littoralis (Linnaeus) (Saldidae). Etton-Maxey Nature Reserve (TF13740769), 12 August-3 September 2015.#
- Saldula opacula (Zetterstedt) (Saldidae). Etton-Maxey Nature Reserve (TF13740769), 12 August 2015.#
- Saldula orthochila (Fieber) (Saldidae). Swaddywell Pit Nature Reserve (TF11630325), 16 June 2015.#
- *Saldula pallipes* (Fabricius) (Saldidae). Etton-Maxey Nature Reserve (TF13740769), 12 August 2015. *Saldula saltatoria* (Linnaeus) (Saldidae). Ailsworth Green Lane (TL12379985), 20 June 2017.
- *Mesovelia furcata* Mulsant & Rey (Mesoveliidae). Etton-Maxey Nature Reserve (TF13700764), 3 September 2015.
- Hebrus ruficeps Thomson (Hebridae). Swaddywell Pit Nature Reserve (TF115036), 21 June 2009. Hydrometra stagnorum (Linnaeus) (Hydrometridae). Castor Hanglands NNR (TF1176800752), 2
- *Microvelia pygmaea* (Dufour) (Veliidae). Castor Hanglands NNR (TF11930163), 13 September 2010. *Microvelia reticulata* (Burmeister) (Veliidae). Etton-Maxey Nature Reserve (TF13490770), 3 September 2015.
- Velia caprai Tamanini (Veliidae). Wildboars Coppice (TF121018), 18 April 2018.
- Velia saulii Tamanini (Veliidae). Maxey (TF13060605), 11 June 2008.
- Aquarius paludum (Fabricius) (Gerridae). Castor Hanglands NNR (TF11930163), 20 May 2010.
- *Gerris argentatus* Schummel (Gerridae). Etton-Maxey Nature Reserve (TF13700775), 3 September 2015.
- Gerris lacustris (Linnaeus) (Gerridae). Ailsworth Green Lane (TL12379985), 20 June 2017.
- Gerris odontogaster (Zetterstedt) (Gerridae). Oldfield Pond (TF132000240), 1 May 2017.
- Gerris thoracicus Schummel (Gerridae). Swaddywell Pit Nature Reserve (TF115036), 10 May 2015.

Nepa cinerea Linnaeus (Nepidae). Oldfield Pond (TF13200024), 1 May 2017.

Ranatra linearis (Linnaeus) (Nepidae). Etton-Maxey Nature Reserve (TF13700764), 3 September 2015.

*Ilyocoris cimicoides* (Linnaeus) (Naucoridae). Etton-Maxey Nature Reserve (TF13490770), 3 September 2015.

Aphelocheirus aestivalis (Fabricius) (Aphelocheiridae). River Nene, Ailsworth (TL108976), 7 September 2012.

*Notonecta glauca* Linnaeus (Notonectidae). Wildboars Coppice (TF12090076), 20 August 2017. *Notonecta maculata* Fabricius (Notonectidae). Wildboars Coppice (TF12090076), 20 August 2017.

Notonecta obliqua Thunberg (Notonectidae). Castor Hanglands NNR (TF11930163), 13 September 2010.

Notonecta viridis Delcourt (Notonectidae). Etton-Maxey Nature Reserve (TF13490770), 3 September 2015.

*Plea minutissima* Leach (Pleidae). Etton-Maxey Nature Reserve (TF13790768), 3 September 2015. *Callicorixa praeusta* (Fieber) (Corixidae). Oldfield Pond (TF13200024), 1 May 2017.

*Corixa panzeri* Fieber (Corixidae). Etton-Maxey Nature Reserve (TF13730769), 3 September 2015. *Corixa punctata* (Illiger) (Corixidae). Oldfield Pond (TF13200024), 1 May 2017.

Cymatia bonsdorffii (C.R. Sahlberg) (Corixidae). Swaddywell Pit Nature Reserve (TF115036), 10 May 2015.

Hesperocorixa linnaei (Fieber) (Corixidae). Oldfield Pond (TF13200024), 1 May 2017.

Hesperocorixa moesta (Fieber) (Corixidae). Oldfield Pond (TF13200024), 1 May 2017.

Hesperocorixa sahlbergi (Fieber) (Corixidae). Oldfield Pond (TF13200024), 1 May 2017.

*Micronecta scholtzi* (Fieber) (Corixidae). Etton-Maxey Nature Reserve (TF13730769), 3 September 2015.

*Paracorixa concinna* (Fieber) (Corixidae). Etton-Maxey Nature Reserve (TF13730769), 3 September 2015.

Sigara distincta (Fieber) (Corixidae). Etton-Maxey Nature Reserve (TF13730769), 3 September 2015.
Sigara dorsalis (Leach) (Corixidae). Etton-Maxey Nature Reserve (TF13490770), 3 September 2015.
Sigara falleni (Fieber) (Corixidae). Etton-Maxey Nature Reserve (TF13490770), 3 September 2015.
Sigara fossarum (Leach) (Corixidae). Etton-Maxey Nature Reserve (TF13490770), 3 September 2015.

*Sigara lateralis* (Leach) (Corixidae). Etton-Maxey Nature Reserve (TF13730769), 3 September 2015. *Sigara nigrolineata* (Fieber) (Corixidae). Wildboars Coppice (TF12090076), 2 July 2017.

#### References

Littlewood, N. 2019. Some additions to the Huntingdonshire (VC31) Hemiptera-Heteroptera list. *Hemipterist* **6**: 270.

Rowley, K. W. 2019. Four species of Hemiptera-Heteroptera new to Northants (VC32). *Hemipterist* **6**: 280-281.

Ryan, R. P. 2019a. The vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. *Hemipterist* **6**: 1-210.

Ryan, R. P. 2019b. Towards a modern vice-county distribution for the Hemiptera-Heteroptera of the British Isles. *Hemipterist* **6**: 284.

EDITORIAL NOTE. I ran the above list of 963 records through my software and found that 228 were new to the historic vice-county distribution (Ryan, 2019a). These are marked with a '#' and will be included in the next interim release of the Distribution and Atlas. The modern vice-county distribution (Ryan, 2019b) will not be published until the family reviews are complete; but I welcome advanced publication of regional modern records like Peter's from any reader who is willing to compile them and send them to me.

# NEW VICE-COUNTY RECORDS OF HEMIPTERA-HETEROPTERA

## MARK G. TELFER

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I recently sent an Excel spreadsheet to Rob Ryan containing all my vice-county records of Hemiptera-Heteroptera from Britain and Ireland up to March 2020. After checking against the Distribution and Atlas (Ryan, 2019), he found the data set to contain 206 new vice-county records, which I list below.

For each entry, vice county number, locality name, grid reference and date (or date range) are given. Unless otherwise mentioned, the recorder and determiner for each record is Mark G. Telfer, but the list includes some specimens which were collected by others and determined by myself, or vice versa. All records relate to adults. Brief notes on the number of individuals, collecting method, host plant, etc. are given as appropriate.

Aneurus avenius (Dufour) (Aradidae)

VC13: Ebernoe Common, SU9727, 22/05/2009, 1 on stump.

VC13: Parham Park, TQ0514, 25/05/2012.

Aradus cinnamomeus Panzer (Aradidae)

VC13: Graffham, SU91, pitfall trapped by Graeme Lyons during 2010, det. Mark G. Telfer.

Legnotus limbosus (Geoffroy) (Cydnidae)

VC8: Compton, SU1269251981, 31/05/2012, 1 by suction sampling.

Sehirus luctuosus Mulsant & Rey (Cydnidae)

VC6: Newton St Loe, ST7137864780, 13/09/2010, 2.

Tritomegas sexmaculatus (Rambur) (Cydnidae)

VC30: 10 Northall Road, Eaton Bray, SP968208, 12/07/2019, 1 found dead on front doormat by Bradley Telfer.

Neottiglossa pusilla (Gmelin) (Pentatomidae)

VC39: Hednesford, c. SK007111, 24/05/2017, 3 by sweeping.

Bathysolen nubilus (Fallén) (Coreidae)

VC54: Keadby Common Tip, SE813120, 18/05/2017, 1 collected by Richard Wilson, det. Mark G. Telfer.

Ceraleptus lividus Stein (Coreidae)

VC39: Hednesford, c. SK007111, 24/05/2017, 1 by suction sampling.

Coriomeris denticulatus (Scopoli) (Coreidae)

VC67: Blyth, NZ2983, 12/09/2007, 6 under herptile felts.

Aphanus rolandri (Linnaeus) (Lygaeidae)

VC29: Devil's Ditch, TL5764, 27/04/2014, 1.

Arocatus longiceps Stål (Lygaeidae)

VC11: Hythe Marina Village, Hythe, SU420085, 17/08/2018, 1 by beating Alder.

VC24: Linford Wood, SP8440, 06/06/2019, 1 female off Italian Alder.

Cymus claviculus (Fallén) (Lygaeidae)

VC2: Carlyon Bay: Shorthorn, SX0652, 09/07/2009, 1 by suction sampling.

VC39: Hednesford, c. SK007111, 24/05/2017, 1 by sweeping.

Cymus melanocephalus Fieber (Lygaeidae)

VC50: Johnstown, SJ311459, 21/05/2012, 2.

VC56: Fernwood, SK82964939, 09/05/2015, 1 by beating cypress hedge.

VC61: Reighton Gap to Black Cliff, TA17, 12/07/2006, 2.

VC64: Drax Power Station, SE6628, 18/05/2011, 1.

Drymus brunneus (R.F. Sahlberg) (Lygaeidae)

VC5: Nutscale Reservoir, SS8582843188, 20/08/2012, 1 by ground-searching.

VC33: Rendcomb College, SP0109, pitfall trapped by Ted Bodsworth during August 2010, det. Mark G. Telfer.

Drymus ryeii Douglas & Scott (Lygaeidae)

VC5: Clatworthy Reservoir, ST0458431223 and ST0460231224, 12/07/2011, 2 at each point by suction sampling.

VC8: Compton, SU126519, 31/05/2012, 1 by suction sampling.

VC27: Sutton Fen RSPB: Drake's Fen, TG36962265, 25/05/2016, 1 by ground-searching.

VC56: Fernwood, SK8349, 09/05/2015, 1 under herptile mat.

Heterogaster urticae (Fabricius) (Lygaeidae)

VC64: Shipley, SE1638, 07/06/2006, common on Stinging Nettle.

Ischnodemus sabuleti (Fallén) (Lygaeidae)

VC3: Exe Estuary RSPB, Exminster Marshes, SX95978761, 09/05/2003, 1.

VC5: Sutton Bingham Reservoir, ST5423811329, 26/05/2011, 4 by ground-searching.

Kleidocerys resedae (Panzer) (Lygaeidae)

VC7: near Chippenham, ST903751, 07/05/2015, 1 off Hazel.

VC112: Lerwick, HU4741, 22/09/2006, 1 on outer deck of the MV Hrossey ferry after crossing from Aberdeen.

Megalonotus chiragra (Fabricius) (Lygaeidae)

VC24: Incombe Hole, SP959156, 06/06/2016, 1 by sieving in calcareous grassland.

VC63: Frickley Colliery, SE46350957, 16/08/2007, 1 by sieving moss under Linaria vulgaris.

Megalonotus praetextatus (Herrich-Schaeffer) (Lygaeidae)

VC13: Cowdray Park, SU90362214, aerial interception trap (a.k.a. vane trap) from 21/07 to 18/08/2011.

Nysius ericae (Schilling) (Lygaeidae)

VC6: Newton St Loe, ST7064, 13/09/2010, 1 male and 1 female.

VC31: Peterborough, TL178960, 07/09/2007, 1 male and 12 females, det Bernard S. Nau.

Nysius graminicola (Kolenati) (Lygaeidae)

VC10: Red Cliff, Yaverland, SZ6185, 13/02/2019, 1 female by sieving on cliff.

VC33: Long Marston Airfield, SP170495, 10/09/2015, 1 female by tapping Common Fleabane.

Nysius huttoni F.B. White (Lygaeidae)

VC54: Keadby Common Tip, SE81041155, 25/07/2017, 4 from draw-down zone of temporary water-body by Richard Wilson, det. Mark G. Telfer.

Nysius senecionis (Schilling) (Lygaeidae)

VC31: Peterborough, TL178960, 07/09/2007, 3.

Nysius thymi (Wolff) (Lygaeidae)

VC2: Carlyon Bay: Shorthorn, SX0652, 25/06/2019, 1 male by suction sampling short, herb-rich sward

VCH39: Inner Belfast Lough ASSI, J354773, 23/06/2008, 1 male with 9 females.

Oxycarenus modestus (Fallén) (Lygaeidae)

VC18: Silvertown Quays, TQ415803, 09/07/2019, 1 off Alder. Apparently the second British locality, following the discovery in Hyde Park, Middlesex, by Jonty Denton and Scotty Dodd in 2018 (Denton, 2018).

Peritrechus geniculatus (Hahn) (Lygaeidae)

VC67: Blyth, NZ2983, 10/07/2007, 1 recorded by David J. Gibbs, det. Mark G. Telfer.

Peritrechus gracilicornis Puton (Lygaeidae)

VC11: Fort Cumberland, SZ6799, 31/05/2017, 1 male recorded by Richard Wilson, det. Mark G. Telfer.

Peritrechus nubilus (Fallén) (Lygaeidae)

VC24: Grangelands, SP80, 16/01/2014, 1.

Raglius alboacuminatus (Goeze) (Lygaeidae)

VC30: near Luton, TL12, 1 pitfall trapped between 01 and 21/05/2018.

Scolopostethus affinis (Schilling) (Lygaeidae)

VC3: Edginswell, Torquay, SX878654, 22/04/2015, 1 suction sampled by Richard Wilson, det. Mark G. Telfer.

VC67: Blyth, power station, NZ30378311, 06/06/2007, 1.

Scolopostethus grandis Horváth (Lygaeidae)

VC31: Peterborough, TL178960, 03/10/2007, 1.

Scolopostethus puberulus Horváth (Lygaeidae)

VC5: Blagdon Reservoir (Lowton), ST2021517239, 10/05/2012, 1 male, 1 female by ground-searching.

Scolopostethus thomsoni Reuter (Lygaeidae)

VC5: Clatworthy Reservoir, ST0460231227, 25/05/2011, 2 by suction sampling.

Stygnocoris sabulosus (Schilling) (Lygaeidae)

VC33: Long Marston Airfield, SP166489, 27/06/2017, 2 by suction sampling.

VC64: Drax Power Station, SE6628, 30/08/2011, 1 by sieving moss, tussocks and a small mammal nest.

Trapezonotus arenarius (Linnaeus) (Lygaeidae)

VC63: Wheatley Hall Rd, Doncaster, SE5906, 15/05/2008, 1.

Trapezonotus desertus Seidenstücker (Lygaeidae)

VC13: Graffham, SU91, pitfall trapped by Graeme Lyons during 2010, det. Mark G. Telfer.

VC28: Leziate Heath, TF6819, 24/04/2012, common in sandy heathland.

Tropistethus holosericus (Scholtz) (Lygaeidae)

VC18: Tilbury, TQ657759, 22/09/2017, 1 male and 1 female by suction sampling.

Berytinus clavipes (Fabricius) (Berytidae)

VC6: Tucking Mill, ST7635261476, 11/08/2010, 2 males and 3 females by suction sampling.

VC18: Tilbury Ashfield A1, c. TQ665756, 23/04/2018, 1 male and 1 female by suction sampling.

Berytinus crassipes (Herrich-Schaeffer) (Berytidae)

VC54: Keadby Common Tip, SE82061168, 18/05/2017, 1 male suction sampled by Richard Wilson, det. Mark G. Telfer.

Berytinus hirticornis (Brullé) (Berytidae)

VC21: Haringey, TQ2891, 16/08/2012, 1 by suction sampling.

Berytinus minor (Herrich-Schaeffer) (Berytidae)

VC3: Edginswell, Torquay, SX880653, 26/05/2015, 1 swept in hay field by Keith N. A. Alexander, det. Mark G. Telfer.

VC5: Clatworthy Reservoir, ST0353930457, 21/06/2011, 1 by suction sampling.

VC33: Long Marston Airfield, SP166489, 12/08/2015, 1 swept.

VC50: Johnstown, SJ3045, 12/04/2012, 1.

Berytinus montivagus (Meyer-Dür) (Berytidae)

VC39: Willenhall Sewage Treatment Works, SO979983, 11/06/2018, 1 recorded by Richard Wilson, det. Mark G. Telfer.

Berytinus signoreti (Fieber) (Berytidae)

VC8: west of Sidbury Hill, SU202500, 04/06/1997, 1.

VC36: The Bury Farm, SO5052, 29/07/2010, 1 by suction sampling.

VC57: Cowdale quarry, near Buxton, SK0872, 27/05/2010, 1 by suction sampling.

Gampsocoris punctipes (Germar) (Berytidae)

VC6: Tucking Mill, ST7661, 11/08/2010, 14 by suction sampling.

Neides tipularius (Linnaeus) (Berytidae)

VC13: Cowdray Park, SU90592242, 31/08/2011, 1.

VC54: Keadby, SE81151177, 2 pitfall trapped during 18/05 to 14/06/2017 by Richard Wilson, det. Mark G. Telfer.

Piesma maculatum (Laporte) (Piesmatidae)

VC8: Compton, SU1269251991, 11/05/2012, 1 by suction sampling.

Acalypta brunnea (Germar) (Tingidae)

VCH7: Killballyboy Wood, S0188612286, 27/05/2015, 1 by sieving moss.

Acalypta carinata (Panzer) (Tingidae)

VC5: Nutscale Reservoir, SS8611143238, 29/05/2012, 1 by suction sampling.

VCH33: NW of Knock Beg, roadside flush, H054500, 11/04/2017, 1 by extraction and dry sieving of moss sample from a calcareous flush.

Acalypta parvula (Fallén) (Tingidae)

VC33: Long Marston Airfield, SP166489, 27/06/2017, 2 by suction sampling.

Agramma laetum (Fallén) (Tingidae)

VC5: Blagdon Reservoir (Lowton), ST2009717265, 27/06/2012, 2.

VC6: Tucking Mill, ST7661, 18/05/2010, 1.

Campylosteira verna (Fallén) (Tingidae)

VC6: Tucking Mill, ST7661, 18/05/2010, 2 by suction sampling.

VC31: Monks Wood NNR, Southedge Ride, TL1979, 17/06/1999, 1 swept.

VC66: Jackie's Beach, N of Souter Point, Whitburn, NZ4162, 13/07/2007, 2 by sieving moss under Dyer's Greenweed.

Kalama tricornis (Schrank) (Tingidae)

VC63: Thorne Colliery, SE7089615728, 23/07/2014, 1 by suction sampling.

VC67: Blyth, dunes, NZ3083, 08/08/2007, 1 swept.

Tingis ampliata (Herrich-Schaeffer) (Tingidae)

VC3: Edginswell, Torquay, SX886658, 20/04/2015, 1 swept by Richard Wilson, det. Mark G. Telfer. *Tingis cardui* (Linnaeus) (Tingidae)

VC3: Edginswell, Torquay, SX880653, 26/05/2015, 1 swept by Keith N. A. Alexander, det. Mark G. Telfer.

Coranus woodroffei P.V. Putshkov (Reduviidae)

VC14: Rye Harbour NR, Limekiln Cottage, TQ945186, 09/08/2006, 1 male sieved from waste hay on sea bank.

Empicoris baerensprungi (Dohrn) (Reduviidae)

VC32: Yardley Chase, SP837544, 29/06/2019, 1 by beating deadwood of Hazel, elms, etc.

Himacerus major (A. Costa) (Nabidae)

VC8: Compton, SU1271952067, 25/07/2012, 1 by suction sampling.

Nabis ericetorum Scholtz (Nabidae)

VC5: Nutscale Reservoir, SS8611143238, 29/05/2012, 1 by suction sampling.

Nabis ferus (Linnaeus) (Nabidae)

VC67: Blyth, N shore of Sleek Burn, NZ29258331, 09/08/2007, 1 female.

Nabis flavomarginatus Scholtz (Nabidae)

VC5: Clatworthy Reservoir, ST0367330790, 13/08/2010, 1 by suction sampling.

Nabis lineatus Dahlbom (Nabidae)

VC5: Clatworthy Reservoir, ST0313430851, 13/08/2010, 2 by suction sampling.

Nabis pseudoferus Remane (Nabidae)

VC18: Silvertown Quays, c. TQ409802, 16/05/2019, 2 males and 4 females.

Nabis rugosus (Linnaeus) (Nabidae)

VC64: Drax Power Station, SE6628, 30/08/2011, 1 male and 2 females.

Anthocoris amplicollis Horváth (Anthocoridae)

VC22: St Leonards Farm, Windsor, SU9274, 01/07/2016, 1 by beating hedge.

VC34: Cadora Woods, SO50, 12/05/2015, 1.

VC36: The Bury Farm, SO5052, 29/07/2010, 2 off Ash keys.

Anthocoris confusus Reuter (Anthocoridae)

VC7: Corsham, ST858705, 26/06/2014, 1.

Anthocoris gallarumulmi (De Geer) (Anthocoridae)

VC33: Long Marston Airfield, SP178491, 23/07/2015, 1.

Anthocoris limbatus Fieber (Anthocoridae)

VC27: Sutton Fen RSPB: Sutton Fen, TG3678522742, 26/05/2016, 1 by beating sallow.

VCH40: Lough Neagh ASSI: Ballinderry Far Waterfoot Beach, c. H954813, 19/09/2019, 1 on beach. *Anthocoris minki* Dohrn (Anthocoridae)

VC18: Silvertown Quays, TQ40998030, 03/09/2013, 3 females by targeted searching of a poplar with numerous spiral galls of *Pemphigus spyrothecae* Passerini.

Anthocoris nemoralis (Fabricius) (Anthocoridae)

VC3: Edginswell, Torquay, SX887652, 23/06/2015, 1 beaten from Hazel hedge by Keith N. A. Alexander, det. Mark G. Telfer.

VC64: Drax Power Station, SE6628, 30/08/2011, 2 by sweeping Wild Carrot.

VC73: Wood of Cree RSPB, The Fen, NX374719, 25/06/2005, 3 recorded by Mark G. Telfer, det. Bernard S. Nau.

Anthocoris sarothamni Douglas & Scott (Anthocoridae)

VC21: Holy Trinity Church, Brompton, TQ27077932, 08/08/2016, 1 off Judas Tree.

Brachysteles parvicornis (A. Costa) (Anthocoridae)

VC17: Thorpe Park, Chertsey, TQ037689, 09/06/2015, 3 off ivy.

VC18: Barling, near, TQ9490, 04/02/2020, 6 by sieving a Deschampsia cespitosa tussock.

VC22: Windsor, SU9374, 16/06/2016, 2 by beating hedges.

Buchananiella continua (F.B. White) (Anthocoridae)

VC1: Tresco: Skirt Island, SV9013, 21/10/2019, 1.

VC15: Richborough, TR3262, 10/08/2016, 1 by beating.

VC16: Transport for London building, 14 Pier Walk, Greenwich, SE10 0ES: green roof on level 7, TQ393799, 1 in Malaise trap sample collected on 08/05/2015 by Liz Powell, det. Mark G. Telfer.

VC24: Stowe NT: Golf Course, pollard lime, SP67243681, 05/06/2015, 2.

VC31: Peterborough, TL178960, 07/09/2007, 5.

VC36: Weobley, orchard, c. SO408513, 13/03/2018, 1.

Cardiastethus fasciiventris (Garbiglietti) (Anthocoridae)

VC7: Corsham, ST859706, 26/06/2014, 2 by beating.

VC33: Long Marston Airfield, SP1748, 24/06/2015, 1 by beating.

VC56: Fernwood, SK82964939, 09/05/2015, 2 by beating cypress hedge.

Elatophilus nigricornis (Zetterstedt) (Anthocoridae)

VC105: Rhidorroch Woods SSSI, NH23889283, 22/06/2010, 2 from a large wounded Scots Pine.

Orius vicinus (Ribaut) (Anthocoridae)

VC24: Rowley Farm, oaks between Walk Wood and Hollybush Wood, TQ002829, 05/08/2010, 1 male and 1 female by beating oak.

VC36: The Bury Farm, SO5052, 19/07/2010, 1 male by beating; 29/07/2010, 3 males and 2 females by beating Apple.

Temnostethus gracilis Horváth (Anthocoridae)

VC7: Corsham, ST856706, 29/06/2018, 1 macropter, 1 brachypter from fallen lime branch.

VC19: Newport, nr Saffron Walden, c. TL519350, 01/10/2014, 1 by beating.

VC32: West Corby, SP8587, 26/08/2015, 1 off willow.

Temnostethus pusillus (Herrich-Schaeffer) (Anthocoridae)

VC11: near Marchwood, SU3909, 15/06/2018, 1.

VC13: Cowdray Park, SU9085722669, aerial interception trap (a.k.a. vane trap) from 18/08 to 31/08/2011, 1.

VC24: Galleons Lane (South) (Rowley Woods complex), SU9982, 14/07/2009, 1.

VC37: Dines Green, Worcester, SO8254, 17/10/2013, 3 by beating Apple and Mistletoe.

VC55: Barkby Thorpe, SK6310208178, 13/07/2010, 1 by beating Ash branches.

Xylocoridea brevipennis Reuter (Anthocoridae)

VC36: Bartestree orchard, SO563411, 31/10/2014, 1 off Pear.

Loricula distinguenda (Reuter) (Microphysidae)

VC13: Graffham, SU91, pitfall trapped by Graeme Lyons during 2010, det. Mark G. Telfer.

Loricula pselaphiformis Curtis (Microphysidae)

VC33: Long Marston Airfield, SP177492, 23/07/2015, 1 by beating.

Acetropis gimmerthalii (Flor) (Miridae)

VC3: Edginswell, Torquay, SX883658, 23/06/2015, 2 swept by Keith N. A. Alexander, det. Mark G. Telfer.

Adelphocoris lineolatus (Goeze) (Miridae)

VC63: Pottontoft Tip, SE656121, 31/07/2015, 1 recorded by Richard Wilson, det. Mark G. Telfer.

Adelphocoris ticinensis (Meyer-Dür) (Miridae)

VC14: Patchurst Marsh, Wartling, TQ6608, 20/08/2014, 1.

Amblytylus nasutus (Kirschbaum) (Miridae)

VC33: Long Marston Airfield, SP173487, 24/06/2015, 1.

Apolygus lucorum (Meyer-Dür) (Miridae)

VC66: Ryhope Dene, NZ419519, 07/08/2007, 5 off Artemisia vulgaris.

Atractotomus mali (Meyer-Dür) (Miridae)

VC7: Corsham, ST856706, 29/06/2018, 1 by beating.

Calocoris roseomaculatus (De Geer) (Miridae)

VC67: Blyth, NZ2982, 09/07/2007, common.

Campyloneura virgula (Herrich-Schaeffer) (Miridae)

VC7: Corsham, ST856706, 29/06/2018.

Capsus wagneri (Remane) (Miridae)

VC22: Iffley Meadows SSSI, Oxford, SP523037, 26/06/2018, 1 male and 1 female from fen vegetation by Richard Wilson, det. Mark G. Telfer.

Chlamydatus evanescens (Boheman) (Miridae)

VC16: Transport for London building, 14 Pier Walk, Greenwich, SE10 0ES, TQ393799, 1 male in pitfall trap collected 24/05/2013 by Richard Wilson, det. Mark G. Telfer. Common in subsequent pitfall samples from green roofs on this building.

Closterotomus trivialis (A. Costa) (Miridae)

VC22: Windsor, SU9374, 16/06/2016, 3 off Cherry Laurel(?) inflorescences.

Cyllecoris histrionius (Linnaeus) (Miridae)

VC3: Edginswell, Torquay, SX881652, 23/06/2015, 1 beaten by Keith N. A. Alexander, det. Mark G. Telfer.

Deraeocoris lutescens (Schilling) (Miridae)

VC7: Chippenham, near, ST903751, 07/05/2015.

VC36: Moccas Park, SO3443, 18/06/2013.

Dichrooscytus gustavi Josifov (Miridae)

VC21: Harefield, TQ050912, 15/07/2013, 4 by beating cypress.

Dichrooscytus rufipennis (Fallén) (Miridae)

VC97: Coille Phuiteachain SSSI, NN0984, 27/06/2010, 1 off Scots Pine.

Dicyphus annulatus (Wolff) (Miridae)

VC6: Tucking Mill, ST7661, 11/08/2010, 1 by suction sampling.

VC67: Blyth, dunes, NZ3083, 08/08/2007, 1.

Halticus luteicollis (Panzer) (Miridae)

VC13: Drovers NT estate, SU81, 11/07/1997, 1.

Heterocordylus genistae (Scopoli) (Miridae)

VC13: The Mens, Badlands, TQ0222, 14/06/2010, very common on Dyer's Greenweed.

Hypseloecus visci (Puton) (Miridae)

VC36: The Bury Farm, SO5052, 29/07/2010, 2 off Mistletoe.

Lygus maritimus Wagner (Miridae)

VC67: Blyth, power station compound, NZ299833, 06/06/2007, 1 off gorse.

Megaloceroea recticornis (Geoffroy) (Miridae)

VC36: The Bury Farm, SO4951, 19/07/2010, 1 swept.

Megalocoleus tanaceti (Fallén) (Miridae)

VC33: Long Marston Airfield, SP166489, 12/08/2015, 4 off Tansy.

Neolygus viridis (Fallén) (Miridae)

VC7: Corsham, ST858705, 26/06/2014, 1.

Notostira erratica (Linnaeus) (Miridae)

VC30: Chute Farm arable reversion: Home Field South, TL0018, 20/09/2016, 1 male swept.

Orthocephalus coriaceus (Fabricius) (Miridae)

VC5: Clatworthy Reservoir, ST0363330738, 09/06/2010, 1.

Orthops basalis (A. Costa) (Miridae)

VC17: Cherkley Court, c. TQ179550, 03/07/2018, 1 male and 1 female collected by Richard Wilson, det. Mark G. Telfer.

VC24: Shenley Wood, SP8236, 11/05/2017, 1.

Orthops campestris (Linnaeus) (Miridae)

VC64: Drax Power Station, SE6628, 30/08/2011, 1 on Wild Carrot.

Orthops kalmii (Linnaeus) (Miridae)

VC33: Long Marston Airfield, SP173483, 24/06/2015, 1 male swept.

Orthotylus bilineatus (Fallén) (Miridae)

VCH3: Glengarriff Nature Reserve, V917570, 17/06 to 01/07/2015, 1 male in yellow pan trap. *Orthotylus caprai* Wagner (Miridae)

VC17: Crystal Palace Park, TQ340712, 23/08/2013, 2 males and 2 females off cypress sp.

Orthotylus flavosparsus (C.R. Sahlberg) (Miridae)

VC67: Blyth, N shore of Sleek Burn, NZ29258331, 09/08/2007, 5 off Grass-leaved Orache.

Orthotylus junipericola Linnavuori (Miridae)

VC16: Transport for London building, 14 Pier Walk, Greenwich, SE10 0ES: level 1, TQ393799, pitfall traps operated by Liz Powell from 04/08 to 04/09/2015, 1 male det. Mark G. Telfer.

Orthotylus viridinervis (Kirschbaum) (Miridae)

VC7: Corsham, ST856706, 29/06/2018, 1 male by beating.

Pachytomella parallela (Meyer-Dür) (Miridae)

VC2: Carlyon Bay: Shorthorn, SX0652, 09/05/2019, 3 males suction sampled by David J. Gibbs, det. Mark G. Telfer.

VC36: Moccas Park, SO340431, 21/06/2013, 1.

Phylus coryli (Linnaeus) (Miridae)

VC50: Llanddulas, SH97, 21/06/2018, by beating Hazel hedges.

Phylus melanocephalus (Linnaeus) (Miridae)

VC36: Moccas Park, SO3443, 18/06/2013.

VC104: Coille Thogabhaig SSSI, NG610121, 25/06/2010.

Phytocoris reuteri Saunders (Miridae)

VC33: Long Marston Airfield, SP165497, 13/08/2015, 1 male by beating Apple.

Pilophorus cinnamopterus (Kirschbaum) (Miridae)

VC55: Barkby Thorpe, SK6207, 18/08/2010, 1 by beating conifers.

Pinalitus cervinus (Herrich-Schaeffer) (Miridae)

VC50: Llanddulas, SH97, 07/06/2018.

Polymerus nigrita (Fallén) (Miridae)

VC5: Clatworthy Reservoir, ST0460231227, 25/05/2011, 1 by suction sampling.

Psallus ambiguus (Fallén) (Miridae)

VC2: Carlyon Bay: Polgaver, SX0652, 11/06/2009, 6 males, 2 females by beating Salix.

VC3: Edginswell, Torquay, SX887652, 23/06/2015, 5 males by beating Hazel hedge, recorded by Keith N. A. Alexander, det. Mark G. Telfer.

VC50: Llanddulas, SH87, 21/06/2018, 1 male by beating.

Psallus assimilis Stichel (Miridae)

VC3: Edginswell, Torquay, SX887658, 23/06/2015, 4 males, 4 females by beating Field Maple hedge, recorded by Keith N. A. Alexander, det. Mark G. Telfer.

Psallus confusus Rieger (Miridae)

VC39: Hednesford, c. SK007111, 22/06/2017, 1 male from oaks in woodland.

Psallus haematodes (Gmelin) (Miridae)

VC37: Bransford Bridge: upstream on N side, SO796531, 20/08/2019, 1 male.

Psallus mollis (Mulsant & Rey) (Miridae)

VC39: Hednesford, c. SK007111, 22/06/2017, 2 males from oaks in woodland.

VC50: Llanddulas, SH97, 21/06/2018, males off mature oak.

Psallus perrisi (Mulsant & Rey) (Miridae)

VC3: Edginswell, Torquay, SX887652, 23/06/2015, 1 male by beating Hazel hedge, recorded by Keith N. A. Alexander, det. Mark G. Telfer.

VC39: Hednesford, c. SK007111, 22/06/2017, 3 males off Cotoneaster.

Psallus varians (Herrich-Schaeffer) (Miridae)

VC3: Edginswell, Torquay, SX881652, 23/06/2015, 3 males off oak, recorded by Keith N. A. Alexander, det. Mark G. Telfer.

VC25: near Ipswich, TM2242, 19/06/2018, beating oak.

Reuteria marqueti Puton (Miridae)

VC17: Nursery Row Park, TQ326785, 18/07/2018, 2 off Hazel.

Rhabdomiris striatellus (Fabricius) (Miridae)

VC50: Llanddulas, SH97, 07/06/2018, 1.

Trigonotylus caelestialium (Kirkaldy) (Miridae)

VC25: near Ipswich, TM2341, light trapping from 14 to 15/08/2018, 2.

VC27: Sutton Fen RSPB: Drake's Fen, TG3622, 19/08/2016, 1 male at Red Deer wallow.

VC33: Long Marston Airfield, SP168483, 25/06/2015, 1 swept.

Trigonotylus ruficornis (Geoffroy) (Miridae)

VC9: Wytch Farm, SY981853, 29/07/2005, 1.

Tytthus pygmaeus (Zetterstedt) (Miridae)

VC5: Clatworthy Reservoir, ST0456432370, 15/08/2011, 1 by ground-searching.

VC33: Long Marston Airfield, SP1749, 31/08/2017, 2 by suction sampling.

Ceratocombus coleoptratus (Zetterstedt) (Ceratocombidae)

VC5: Clatworthy Reservoir, ST0313430851, 13/08/2010, 3 by suction sampling.

Cryptostemma alienum Herrich-Schaeffer (Dipsocoridae)

VC106: Easter Moy on River Conon, NH487544, 30/06/2003, 1 collected by Mark G. Telfer, det. Bernard S. Nau.

VC106: Achanalt, NH265606, 30/06/2003, 1 collected by Mark G. Telfer, det. Bernard S. Nau.

VCH3: Glengarriff Nature Reserve, V9157, 23/05/2015, 1 netted in flight over riverine shingle.

Pachycoleus waltli Fieber (Dipsocoridae)

VCH33: Monawilkin ASSI, H08995291, 11/04/2017, 10 from calcareous flush by sieving in the field, and extraction and dry-sieving of a moss sample.

Halosalda lateralis (Fallén) (Saldidae)

VC16: Cliffe Pools RSPB, TQ713773, 10/06/2003. 1.

Salda littoralis (Linnaeus) (Saldidae)

VC98: Loch Tulla, NN3143, 25/06/2004, 1.

Saldula arenicola (Scholtz) (Saldidae)

VC14: Rye Harbour NR, pit 5, TQ93831814, 09/08/2006, 1 male.

Gerris lateralis Schummel (Gerridae)

VC67: Blyth, coal/ash area, ditch, NZ295844, 10/09/2007, 1 male and 1 female.

Notonecta viridis Delcourt (Notonectidae)

VC39: Byrkley Park, SK12, 13/11/2008, 1 by pond-netting.

#### Acknowledgements

I thank Rob Ryan for his considerable help and encouragement to produce this paper. I would also like to thank all those who have determined my specimens, provided specimens for determination, or facilitated the fieldwork from which these records derive.

#### References

Denton, J. 2018. *Oxycarenus modestus* (Hemiptera: Lygaeidae) new to Britain from Middlesex. *British Journal of Entomology and Natural History* **31**: 37-38.

Ryan, R. P. 2019. The vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. *Hemipterist* **6**: 1-210.

EDITORIAL NOTE. The above record for *Kleidocerys resedae* in VC112, on a ferry after crossing from Aberdeen, is difficult to assign to a vice-county, as Mark perhaps hints by the detailed nature of the record. The deck of a ferry is obviously not a natural habitat for the bug, and it is not clear whether the specimen taken by Mark boarded in Aberdeen or in Lerwick. Consequently, I will not, for now, add this record to the Distribution and Atlas (Ryan, 2019), but await confirmation by a second, land-based record. There are six new vice-county records in this article which duplicate some of those in the article by Peter Kirby (pp286-311), specifically *Nysius ericae*, *Nysius senecionis*, *Scolopostethus grandis*, *Campylosteira verna* and *Buchananiella continua* for VC31, and *Temnostethus gracilis* for VC32. This duplication was only noticed after both articles had been agreed with the authors, and the records entered into the Distribution and Atlas, so the articles have been left unaltered.

# A BROWSABLE VERSION OF THE FAMILY REVIEWS OF PUBLISHED RECORDS IS NOW AVAILABLE ONLINE

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The reviews of the published records for the Hemiptera-Heteroptera of the British Isle for the first eleven families, published above (pp1-276), are now available for download as a browsable version on the Atlas webpage (https://sites.google.com/site/britishhetbugatlas/). This follows the structure published in Ryan (2019), although it is obviously incomplete. Rather than being implemented as a separate website, this version exists as a zipped file; which once unzipped can be run locally on the user's computer, without need for access to the internet at the time. The zipped file comprises HTML files, with JPG and PNG files for the images, and has been tested for the browsers Chrome, Edge and Internet Explorer. The browsable version is run by double-clicking the HTML file named 'Double-ClickHereToStart', and then following the hypertext links as required. There is also an Excel spreadsheet available for download, containing all the records from which both the above published reviews and the browsable version were generated by a Visual Basic computer program.

#### Reference

Ryan, R. P. 2019. The update of Southwood and Leston (1959). Hemipterist 6: 285-287.

# VERSPREIDINGSATLAS NEDERLANSE WANTSEN (HEMIPTERA-HETEROPTERA) [A DISTRIBUTION ATLAS OF THE HEMIPTERA-HETEROPTERA OF THE NETHERLANDS] IS NOW COMPLETE

R. P. RYAN 38 St John Street, Oxford, UK, OX1 2LH RobRyanBugs@gmail.com

I reviewed the first three volumes of this excellent publication five years ago (Ryan, 2015) and I have since received the next two volumes, which seem to complete the set. These are as follows.

Volume 4: Aukema, B. & Hermes, D. J. 2016. ISBN 978-90-76261-11-9. 158 pages, covering the Aradidae, Lygaeidae, Piesmatidae, Berytidae & Pyrrhocoridae.

Volume 5: Aukema, B. & Hermes, D. J. 2020. ISBN 978-90-76261-18-8. 158 pages, covering the Stenocephalidae, Rhopalidae, Alydidae, Coreidae, Cydnidae, Thyreocoridae, Plataspidae, Acanthosomatidae. Scutelleridae & Pentatomidae.

Volumes 4 and 5 follow the same superb standard as the previous three volumes, and I need comment no further on them. I would like to thank again the publishers and authors for making these books available to me.

#### Reference

Ryan, R. P 2015. Book review: Verspreidingsatlas Nederlanse wantsen (Hemiptera-Heteroptera) [A Distribution Atlas of the Hemiptera-Heteroptera of the Netherlands]. Hemipterist 2: 51-53.

# PSALLUS PARDALIS SEIDENSTÜCKER (HEMIPTERA: MIRIDAE) NEW TO OXFORDSHIRE (VC23)

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I have previously reported four species of Miridae new to Oxfordshire (VC23) from a Turkey Oak, *Quercus cerris* L. (Fagaceae), in University Parks, Oxford (SP513072); specifically *Psallus anaemicus* Seidenstücker, *Psallus helenae* Josifov, *Psallus lucanicus* Wagner and *Reuteria marqueti* Puton (Ryan, 2016 & 2019). On 6 July 2020, I visited this tree again and beat six females of *Psallus pardalis* Seidenstücker, new to the vice-county; together with *P. helenae* (one male) and *P. anaemicus* (eight males and seventeen females). *P. lucanicus* was not found. Another visit on 7 August 2020 did not produce any of the above *Psallus* species, but a single female of *R. marqueti* was obtained. Hence, this single example of Turkey Oak has now produced five new vice-county records for VC23. Given that the large numbers of *Psallus* obtained in 2015 did not include any *P. pardalis*, which was first recorded in the British Isles by Telfer (2017), I assume that this species is a relatively new arrival to the tree.

#### References

Ryan, R. P. 2016. Some interesting captures of Hemiptera-Heteroptera from a Turkey Oak, *Quercus cerris* L. (Fagaceae), in University Parks, Oxford. *Hemipterist* 3: 70-72.

Ryan, R. P. 2019. *Reuteria marqueti* Puton (Hemiptera: Miridae) in Oxfordshire (VC23). *Hemipterist* 6: 274-275.

Ryan, R. P. 2020. Vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. Interim release May 2020. https://sites.google.com/site/britishhetbugatlas/.

Telfer, M. G. 2017. *Psallus pardalis* Seidenstücker, 1966 (Hemiptera: Miridae) new to Britain. *Hemipterist* **4**: 81-84.

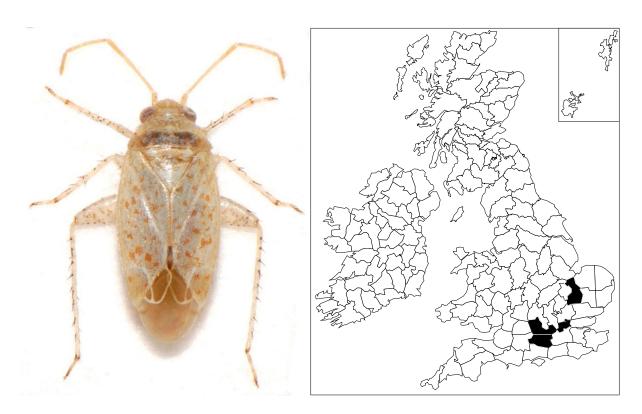


FIGURE 1. Psallus pardalis and its previous vice-county distribution (Ryan, 2020).

#### THE ENTOMOLOGICAL BIBLIOGRAPHY OF ROBERT RYAN

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#### Introduction

When I find a useful article, I frequently want to know what else the author has written and where; but there is seldom a listed bibliography, outside obituaries. For an hemipterist, most of what they have written can be found by scouring the main entomological journals. However, this is a bit of a slog, and there may be much elsewhere, particularly in local wildlife publications. Consequently, I would like to offer readers the opportunity to publish their personal bibliographies in this journal. In order to show willing, I start with my own.

To avoid repetition of journal names, the publications are listed under separate headings for each journal. The volume, page range and year of publication are given after the title. The list below includes all of my articles up to the end of 2020, excluding those in the *Hemipterist*.

#### Antenna (1)

A practical method for the use of carbon dioxide as an entomological killing agent in the field. **13**: 16-17 (1989).

### **Bulletin of the Yorkshire Naturalists' Union (1)**

A survey of the Heteroptera in the area of Kingston-upon-Hull (1979-1981). **46**: 29-34 (2006). [Amended by *Hemipterist* **4**: 146.]

### **Entomologist's Monthly Magazine (16)**

Orthotylus caprai Wagner (Hemiptera - Miridae) new to Britain. 144: 129-130 (2008).

Dicyphus pallidus (Herrich-Schaeffer) (Hemiptera - Miridae) new to Britain. 146: 169-171 (2010).

New vice-county records for *Dicyphus pallidus* (Herrich-Schaeffer) (Hemiptera - Miridae). **147**: 248-249 (2011).

New records for *Dicyphus pallidus* (Herrich-Schaeffer) (Hemiptera: Miridae). 149: 2 (2013).

Some records of Eremocoris podagricus (Fabricius) (Hemiptera - Lygaeidae). 149: 136-137 (2013).

Plotting distribution maps using Visio and Visual Basic. 149: 165-180 (2013).

*Chlamydatus evanescens* (Boheman) (Hemiptera: Miridae) in Buckinghamshire, Wiltshire & Berkshire. **149**: 270-271 (2013).

Agramma laetum (Fallén) (Hemiptera - Tingidae) associated with Field Woodrush, Luzula campestris (L.) (Juncaceae). **149**: 271-272 (2013).

Agnocoris reclairei (Wagner) (Hemiptera: Miridae) new to Watsonian Berkshire. 150: 5 (2014).

Adelphocoris ticinensis (Meyer-Dür) (Hemiptera: Miridae) new to Oxfordshire and Berkshire. **150**: 5 (2014).

Calocoris alpestris (Meyer-Dür) (Hemiptera: Miridae) associated with Allium ursinum L. (Amaryllidaceae). **150**: 63 (2014).

The Geranium Bug, *Corizus hyoscyami* (Linnaeus) (Hemiptera: Rhopalidae), breeding in Buckinghamshire and Oxfordshire. **150**: 63-64 (2014).

Some records of noteworthy Longhorn Beetles (Coleoptera: Cerambycidae). 150: 64 (2014).

Anthocoris visci Douglas (Hemiptera: Anthocoridae) new to Oxfordshire. 150: 240 (2014).

Further records of *Notostira erratica* (Linnaeus) (Hemiptera: Miridae) from Oxfordshire, and the insect new to Berkshire and Buckinghamshire. **151**: 125-126 (2015).

New county records for some species of Hemiptera-Heteroptera from Homefield Wood, Buckinghamshire. **151**: 176 (2015).

### **Entomologist's Record and Journal of Variation (21)**

Man bitten by Cardiastethus fasciiventris (Garbiglietti) (Hem., Anthocoridae). 123: 156 (2011).

The use of a car vacuum cleaner for collecting Hemiptera-Heteroptera from mosses. **123**: 160-161 (2011).

Book review: Aphids - Aphidinae (Macrosiphini). 123: 247-248 (2011).

Encounters with GeoCaching. 123: 294 (2011).

Stephanitis takeyai Drake & Maa (Hem., Tingidae) at Box Hill, Surrey. 124: 24 (2012).

Tuponia brevirostris Reuter (Hem., Miridae) at Lepe, Hampshire. 124: 29 (2012).

Dicyphus escalerae Lindberg (Hem., Miridae) in Oxford. 124: 58 (2012).

A good year for *Corizus hyoscyami* (L.) (Hem., Rhopalidae). **124**: 143-145 & 288 (2012).

Stenodema holsata (Fabricius) (Hem., Miridae) in the Chiltern Hills. 124: 145-147 (2012).

Dichrooscytus gustavi Josifov (Hem., Miridae) doing well in the Chiltern Hills. 124: 201-202 (2012).

Stephanitis takeyai Drake & Maa (Hem., Tingidae) new to Oxfordshire. 124: 204-205 (2012).

Pachytomella parallela (Meyer-Dur) (Hem., Miridae) in the Chiltern Hills. 124: 243 (2012).

Closterotomus trivialis (A. Costa) arrives in Oxford and Agnocoris reclairei (Wagner) returns (Hem., Miridae). 124: 277-278 (2012).

A new site for the Purple Emperor butterfly, Apatura iris (L.) (Lep., Nymphalidae), in Oxfordshire. **125**: 29 (2013).

The snakefly *Subilla confinis* (Stephens) (Raphidioptera, Raphidiidae) new to Berkshire. **125**: 39 (2013).

Five additions to the Heteroptera county list from a brownfield site in Oxfordshire. 125: 74-76 (2013).

Orsillus depressus (Mulsant & Rey) (Hem., Lygaeidae) and Brachycarenus tigrinus (Schilling) (Hem., Rhopalidae) in Oxford. **125**: 135-136 (2013).

*Metopoplax ditomoides* (A. Costa) (Hem., Lygaeidae) and *Brachynotocoris puncticornis* Reuter (Hem., Miridae) briefly visit Oxfordshire. **125**: 237-238 (2013).

Tuponia brevirostris Reuter (Hem., Miridae) new to Oxfordshire. 126: 12 (2014).

Fenestral egg laying in an Angle Shades Moth, *Phlogophora meticulosa* (L.) (Noctuidae) and an escape tactic in the Swallow-tailed Moth, *Ourapteryx sambucaria* (L.) (Geometridae). **126**: 192-193 (2014). *Psallus salicis* (Kirschbaum) (Hem.: Miridae) new to Oxfordshire. **127**: 31-32 (2015).

#### **British Journal of Entomology and Natural History (47)**

Deraeocoris olivaceus (Fabr.) (Hem:, Miridae) new to Oxfordshire. 25: 93-94 (2012).

Deraeocoris scutellaris (Fabr.) (Hem:, Miridae) in the Chiltern Hills. 25: 113-114 (2012).

Aradus cinnamomeus Panzer (Hem:, Aradidae) new to Oxfordshire. 25: 115-116 (2012).

Miridius quadrivirgatus (A. Costa) (Hem.: Miridae) in Berkshire. 25: 116 (2012).

Chorosoma schillingii (Schilling) (Hemiptera: Rhopalidae) in Surrey. 25: 176-177 (2012).

An addendum to Southwood & Leston's land and water bugs of the British Isles. 25: 205-215 (2012).

The use of a domestic vacuum cleaner as a suction sampler. 25: 224-225 (2012).

Psallus luridus Reuter (Hemiptera: Miridae) in North Wiltshire. 26: 8 (2013).

Legnotus limbosus (Geoffroy) (Hemiptera: Cydnidae) in my garden. 26: 95-97 (2013).

Chlamydatus evanescens (Boheman) (Hemiptera: Miridae) – are reports of its rarity greatly exaggerated? **26**: 105-108 (2013).

An atlas of the British Hemiptera-Heteroptera from the county records of Massee (1955). **26**: 144 (2013).

Myremedobia exilis (Fallén) (Hemiptera: Microphysidae) new to Oxfordshire (VC23). **26**: 155-156 (2013).

Recent changes to the British list of the Hemiptera-Heteroptera. 26: 209-210 (2013).

Drag Vac - another use of a domestic vacuum cleaner as a suction sampler, 26: 217-218 (2013).

Nysius graminicola (Kolenati) (Hemiptera: Lygaeidae) in West Sussex (VC13). 26: 245 (2013).

Psallus albicinctus (Kirschbaum) (Hemiptera: Miridae) new to North Wiltshire (VC7), 26: 246 (2013).

Noteworthy Hemiptera-Heteroptera from Whitecross Green Wood, Oxfordshire. 27: 11-12 (2014).

All four *Notonecta* L. (Hemiptera: Notonectidae) in one pool, and *Aquarius paludum* (F.) (Hemiptera: Gerridae) too. **27**: 25-26 (2014).

An Atlas of the Hemiptera-Heteroptera of the British Isles, updated. 27: 100 (2014).

Chlamydatus saltitans (Fallén) (Hemiptera: Miridae) new to Watsonian Oxfordshire. 27: 127 (2014).

A compact, practical system for storing insect specimens. 27: 127-129 (2014).

Buchananiella continua (F.B. White) (Hemiptera: Anthocoridae) new to Oxfordshire. 27: 219-220 (2014).

New county records for some species of Hemiptera-Heteroptera from North Wiltshire (VC7). **27**: 220 (2014).

A shore bug bonanza in Oxfordshire and *Saldula opacula* (Zetterstedt) (Hemiptera: Saldidae) new to the county. **28**: 57-58 (2015).

Closterotomus trivialis (A. Costa) (Hemiptera: Miridae) established in Oxford. 28: 99 (2015).

Is Eremocoris podagricus (Fabricius) (Hemiptera: Lygaeidae) an urban insect? 28: 119 (2015).

The Undertaker Bug, *Chlamydatus evanescens* (Boheman) (Hemiptera: Miridae), denizen of urban cemeteries. **28**: 192 (2015).

The Ring-tipped Grassbug, *Notostira erratica* (L.) (Hemiptera: Miridae), in Warwickshire, Northamptonshire and Gloucestershire. **28**: 210-211 (2015).

The Wellingtonia Bug, *Orthotylus caprai* Wagner (Hemiptera: Miridae), goes forth. **28**: 228-229 (2015).

The Heather Shieldbug, *Rhacognathus punctatus* (Linnaeus), (Hemiptera: Pentatomidae) new to Oxfordshire (VC23). **29**: 43-44 (2016).

Collecting Sphagnum Bugs, *Hebrus* Curtis (Hemiptera: Hebridae), using a domestic vacuum cleaner. **29**: 113-114 (2016).

Miridius quadrivirgatus (A. Costa) (Hemiptera: Miridae) new to Oxfordshire. 29: 177 (2016).

A photographic method for creating habitus images of Hemiptera-Heteroptera. 29: 249-251 (2016).

Some egg-laying preferenda of the Common Moss Bug, *Acalypta parvula* (Fallén) (Hemiptera: Tingidae). **30**: 29-30 (2017).

The nymph of the Down Moss Bug, *Campylosteira verna* (Fallén) (Hemiptera: Tingidae), found at last. **30**: 107-108 (2017).

A shortened egg stage in *Tetraphleps bicuspis* (Herrich-Schaeffer) (Hemiptera: Anthocoridae). **30**: 191-192 (2017).

A spring record of the Western Conifer Seed Bug, *Leptoglossus occidentalis* Heidemann (Hemiptera: Coreidae), on larch, *Larix* spp. (Pinaceae). **30**: 224 (2017).

The vice-county distribution of the Hemiptera-Heteroptera, an appeal for records. 30: 242 (2017).

Minute bugs (Hemiptera: Microphysidae) in association with evergreens and conifers. 31: 25-26 (2018).

Anthocoris minki Dohrn (Hemiptera: Anthocoridae) in South-east Yorkshire (VC61). 31: 30 (2018).

Some interesting Hemiptera-Heteroptera from a cemetery in Salisbury, Wiltshire. **31**: 38-39 (2018). [Amended by *Hemipterist* **6**: 235-236.]

The Vice-county Distribution and Atlas of the Hemiptera-Heteroptera of the British Isles is now available. **31**: 204-205 (2018).

Corizus hyoscyami (L.) (Hemiptera: Rhopalidae) goes north. 31: 245-246. (2018).

The general geographical distribution of the Hemiptera-Heteroptera of the British Isles. **32**: 47-50 (2019).

The most widespread members of the Hemiptera-Heteroptera in the British Isles. 32: 239-240 (2019).

Recent changes to the list of Hemiptera-Heteroptera of the British Isles. 32: 363-364 (2019).

The use of polyvinyl alcohol as an entomological adhesive. 33: 136-137 (2020).

#### Internet (3)

Atlas of the British Hemiptera-Heteroptera from the county records of Massee (1955). https://archive.org/details/@robryanbugs. (2013).

Atlas of the Hemiptera-Heteroptera of the British Isles [second edition]. https://archive.org/details/@robryanbugs. (2014)

Annotated addendum to Southwood & Leston's land and water bugs of the British Isles. https://archive.org/details/@robryanbugs. (2018).

#### NEW VICE-COUNTY RECORDS PUBLISHED IN OTHER JOURNALS

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I normally publish lists of new vice-county records in other journals once per year as 'roundups' for the whole of the previous year, the last being in the previous (May) issue of the present volume of this journal. However, given that species new to the British Isles have recently appeared in print, I decided to compile this interim roundup in order that they may be included in the interim release of the atlas which accompanies this issue of the *Hemipterist*. The new vice-county records are as follows.

Legnotus limbosus (Geoffroy) (Cydnidae) VC58 & VC59 (Hedges & Hunter, 2020).

Rhaphigaster nebulosa (Poda) (Pentatomidae) VC15 (Cook, 2020).

Sciocoris sideritidis Wollaston (Pentatomidae) VC18 (Couch, 2018 & 2020) new to British Isles.

Acompus pallipes (Herrich-Schaeffer) (Lygaeidae) VC21 & VC24 (Bantock & Ashby, 2020).

Chilacis typhae (Perris) (Lygaeidae) VC86 (Ramsay, 2020).

Horvathiolus superbus (Pollich) (Lygaeidae) VC64 (Flanagan, 2020) new to British Isles.

Derephysia foliacea (Fallén) (Tingidae) VC6 (Fleetwood & Chandler, 2020).

Coranus woodroffei P.V. Putshkov (Reduviidae) VC15 (Cook, 2020).

*Prostemma guttula* (Fabricius) (Nabidae). A post on Facebook (*www,facebook.com*) by Stuart Read reports this species from Landguard Point, East Suffolk (VC25) on 25 May 2020. The supplied photographs show the bug to be a brachypter.

Teloleuca pellucens (Fabricius) (Saldidae) (as Salda riparia) VC67 (Harrison, 1918).

#### References

Bantock, T. M. & Ashby, M. A. 2020. Exhibit. *British Journal of Entomology and Natural History* **33**: 179-180.

Cook, P. E. 2020. Exhibit. British Journal of Entomology and Natural History 33: 180.

Couch, Y. 2018. A shieldbug new to the UK and a bush cricket new to Essex from a site in Purfleet. *Essex Naturalist* **35**: 90-93.

Couch, Y. 2020. Exhibit. British Journal of Entomology and Natural History 33: 180.

Flanagan, J. 2020. Exhibit. British Journal of Entomology and Natural History 33: 180.

Fleetwood, R. N. & Chandler, P. J. 2020. Saproxylic and other invertebrates from a single decaying ash tree in Leigh Woods, Bristol. *British Journal of Entomology and Natural History* **33**: 17-32.

Harrison, J. W. H. 1918. Rare Hemiptera-Heteroptera in the north-eastern counties with notes on other forms. *Entomologist* **51**: 2-5.

Hedges, G. & Hunter, T. 2020. Recent Hemiptera records from Cheshire (VC58) and South Lancashire (VC59). *British Journal of Entomology and Natural History* **33**: 38-39.

Ramsay, A. J. 2020. A further Scottish site for *Chilacis typhae* (Perris) (Hemiptera-Heteroptera: Artheneidae) in central Scotland. *British Journal of Entomology and Natural History* **33**: 221.

CICADULA FLORI (J. SAHLBERG) (HEMIPTERA: CICADELLIDAE) IN EAST KENT. A male of this rather nondescript yellow hopper was swept from Carex acuta growing beside the Great Stour near Evegate Mill, Aldington (TR0738) on 13 June 2020, which may be the first record for the county. Although listed as RDBK it does appear to be a relatively widespread species in lowland England, and I have also taken it in Barrow Farm Fen (SU4697) on 25 June 2011, and at several Surrey sites including Farnham bypass (beside River Wey) (SU8547) on 12 June 2013, Thundry Meadows (SU8943) on 25 July 2018, and Burgess Park (TQ3378) on 16 July 2019, all in association with tall waterside sedges. JONTY DENTON, 31 Thorn Lane, Four Marks, Hants GU34 5BX.

RAMBUR'S SHIELDBUG TRITOMEGAS SEXMACULATUS (RAMBUR) (HEMIPTERA: CYDNIDAE) IN SURREY, WITH FURTHER RECORDS FROM KENT. Tritomegas sexmaculatus has expanded rapidly across Kent since its discovery; and is to be expected here anywhere Ballota nigra grows. It was abundant around Nackington Road, Canterbury in June 2019 (with Macrotylus horvathi (Reuter) (Hemiptera: Miridae)), where I did not find it in 2017. The road network is proving a useful conduit, with large colonies beside the A2 near Gravesend (TQ536518) and A21 near Sevenoaks (TQ615726) in early October 2019. In 2020 it was present at the opposite end of the county at Richborough Power Station (TR3262) on 15 May; and was widespread around Faversham (TR0359) on 13 May and 22 June. So, it was no surprise for it to finally turn up in Surrey beside Wisley Golf Course ((TQ0559) on 20 August 2019; a full five years since I had one in Middlesex at Richmond College, Twickenham (TQ1573) on 14 August 2014. JONTY DENTON, 31 Thorn Lane, Four Marks, Hants GU34 5BX.

EMPICORIS RUBROMACULATUS (BLACKBURN) (REDUVIDAE) IN HERTFORDSHIRE (VC20), SURREY (VC17) AND BEDFORDSHIRE (VC30), NEW TO THE BRITISH ISLES. I found a specimen of this bug on 30 July 2018 in the Dementia Unit at Trembaths Nursing Home, Letchworth, Hertfordshire (VC20) (TL22933407), where I work as a Chaplain. I had been recording various bugs on the walls which had come through the open windows during a spell of very hot weather. I saw the bug at the junction between the wall and ceiling in a corridor; and posted photos of it on the UK Hemiptera Facebook Group (https://www.facebook.com/groups/1049706121790920/) that evening. The photo was seen by Marco de Haas who identified it as Empicoris rubromaculatus. Jim Flanagan later confirmed it on the same thread having gone through Faune de France (92). As I recall, I handed the specimen on to Sheila Brooke, who discussed it with Bernard Nau. It was then sent to Tristan Bantock at the Natural History Museum. Having seen the photos, Harry Rutherford in South London (Surrey, VC17) posted a photo of a specimen in his moth trap the previous year which was also identified as the same species. On 6 November 2018, during my lunch hour at the other care home where I work in Shefford, Bedfordshire (VC30), I swept oak leaves in a nearby spot and found further specimens of the bug. See Plate 1 for photographs of the insect. STEPHEN PLUMMER, stephen.r.plummer@gmail.com.

ADDITIONS TO THE EAST KENT (VC15) HEMIPTERA-HETEROPTERA LIST. This note reports the records of three bug species which according to the latest interim release of the Atlas are the first for East Kent (VC15). The first is *Campylomma verbasci* (Meyer-Dür) (Miridae), adults of which were abundant on basal leaves of great mullein *Verbascum thapsus* growing on waste ground near Richborough Power Station on 10 June 2020. On 16 July 2020 I found numerous adults and nymphs of *Chlamydatus evanescens* (Boheman) (Miridae), running around amongst white stonecrop *Sedum album* growing beside a road near Richborough Power Station (TR326624). Other significant captures at this site included the mirids *Hallodapus montandoni* Reuter and *Macrotylus horvathi* (Reuter) on 10 June 2020, and the Lygaeids *Emblethis denticollis* Horváth on 22 May 2020 and *Ortholomus punctipennis* (Herrich-Schäffer) on 16 July 2020. Finally, I swept a male of *Brachycarenus tigrinus* (Schilling) (Rhopalidae) from a field margin near the Great Stour, east of Evegate Mill (TR067382) on 24 July 2020. JONTY DENTON, *31 Thorn Lane, Four Marks, Hants GU34 5BX*.

ADDITIONS TO THE DORSET (VC9) HEMIPTERA-HETEROPTERA LIST. This note reports the first records of two Mirid bug species in Dorset (VC9), both recent additions to the British List. On 3 July 2020 Hypseloecus visci (Puton) (Miridae) nymphs were numerous and two adult females were beaten from an isolated small clump (circa 80cm in diameter) of mistletoe Viscum album on hawthorn Crataegus monogyna growing beside the old railway line adjacent to Ferndown Industrial Estate at SU055010, where Cacopsylla visci (Curtis) (Hemiptera: Psyllidae) was also present. Nearby a mature Turkey oak Quercus cerris at SU056011 yielded several adults of Psallus pardalis Seidenstucker (Miridae), also on 3 July 2020. JONTY DENTON, 31 Thorn Lane, Four Marks, Hants GU34 5BX.

EURHADINA KIRSCHBAUMI WAGNER (HEMIPTERA: CICADELLIDAE) IN HERTFORDSHIRE (VC20). I beat a single male of this scarce and enigmatic species alongside E. pulchella (Fallen) from a medium-sized oak tree near Chadwell Lane, Stevenage (TL2223) on the 18 July 2020. JONTY DENTON, 31 Thorn Lane, Four Marks, Hants GU34 5BX.

# PLATE 1



Empicoris rubromaculatus (Blackburn) (Reduviidae) (top and bottom) (photos: Stephen Plummer).

#### NEW VICE-COUNTY RECORDS FROM THE LOCAL NATURALISTS' JOURNAL ADASTRA

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Adastra is published by the Sussex Biodiversity Records Centre (https://sxbrc.org.uk/projects/publications.php). Over the last six years, the county recorder Graeme Lyons has written reports on local Heteroptera for this journal, which include many records new to the Vice-county Distribution and Atlas (Ryan, 2019). These I list below, which will be included in the next interim release of the atlas. The year of the journal issue in which each record is published is given in brackets.

Carpocoris purpureipennis (De Geer) (Pentatomidae) VC13 (2018)

Nezara viridula (Linnaeus) (Pentatomidae) VC13 (2017)

Sciocoris cursitans (Fabricius) (Pentatomidae) VC14 (2019)

Coptosoma scutellatum (Geoffroy) (Plataspididae) VC14 (2019) new to the British Isles

Arenocoris fallenii (Schilling) (Coreidae) VC14 (2016)

Acompus rufipes (Wolff) (Lygaeidae) VC13 (2017)

Aphanus rolandri (Linnaeus) (Lygaeidae) VC13 (2018)

Arocatus longiceps Stål (Lygaeidae) VC13 (2018)

Beosus maritimus (Scopoli) (Lygaeidae) VC14 (2018)

Emblethis denticollis Horváth (Lygaeidae) VC14 (2019)

Eremocoris podagricus (Fabricius) (Lygaeidae) VC14 (2019)

Megalonotus emarginatus (Rey) (Lygaeidae) VC13 (2018)

Rhyparochromus vulgaris (Schilling) (Lygaeidae) VC14 (2018)

Berytinus clavipes (Fabricius) (Berytidae) VC14 (2018)

Berytinus hirticornis (Brullé) (Berytidae) VC13 (2017)

Empicoris baerensprungi (Dohrn) (Reduviidae) VC13 (2017)

Empicoris rubromaculatus (Blackburn) (Reduviidae) VC13 & VC14 (2019)

Elatophilus nigricornis (Zetterstedt) (Anthocoridae) VC13 & VC14 (2019)

Adelphocoris seticornis (Fabricius) (Miridae) VC14 (2018)

Alloeotomus gothicus (Fallén) (Miridae) VC13 (2017)

Capsodes sulcatus (Fieber) (Miridae) VC14 (2019)

Closterotomus trivialis (A. Costa) (Miridae) VC13 & VC14 (2018)

Phytocoris insignis Reuter (Miridae) VC13 (2017)

Pinalitus viscicola (Puton) (Miridae) VC13 (2016)

Polymerus palustris (Reuter) (Miridae) VC14 (2018)

Ceratocombus coleoptratus (Zetterstedt) (Ceratocombidae) VC13 (2019)

Hebrus ruficeps Thomson (Hebridae) VC13 (2019)

More details of the record for *Coptosoma* can be found on Graeme's blog *The Lyon's Share* (http://analternativenaturalhistoryofsussex.blogspot.com/2019/07/my-first-uk-first-is-family-new-to.html).

#### Reference

Ryan, R. P. 2019. The vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. *Hemipterist* **6**: 1-210.

#### **Appendix**

I sent a draft of this paper to Graeme, who kindly sent his master spreadsheet, which contained more new VC records. These records are listed below, with the most recent recorded year given in brackets.

Aneurus laevis (Fabricius) (Aradidae) VC13 (2014)

Rhaphigaster nebulosa (Poda) (Pentatomidae) VC14 (2020)

Beosus maritimus (Scopoli) (Lygaeidae) VC13 (2020)

Cymus claviculus (Fallén) (Lygaeidae) VC13 (2017)

Drymus latus Douglas & Scott (Lygaeidae) VC14 (2019)

Drymus pumilio Puton (Lygaeidae) VC13 (1994) & VC14 (2020)

Drymus ryeii Douglas & Scott (Lygaeidae) VC13 (1998)

Eremocoris plebejus (Fallén) (Lygaeidae) VC14 (2005)

Graptopeltus lynceus (Fabricius) (Lygaeidae) VC13 (2019)

Megalonotus dilatatus (Herrich-Schaeffer) (Lygaeidae) VC13 (2020)

Megalonotus sabulicola (Thomson) (Lygaeidae) VC13 (2018)

Metopoplax ditomoides (A. Costa) (Lygaeidae) VC14 (2005)

Nysius cymoides (Spinola) (Lygaeidae) VC13 (2019)

Nysius ericae (Schilling) (Lygaeidae) VC14 (2017)

Nysius thymi (Wolff) (Lygaeidae) VC13 (2018) & VC14 (2004)

Peritrechus gracilicornis Puton (Lygaeidae) VC13 (2017)

Rhyparochromus pini (Linnaeus) (Lygaeidae) VC13 (2018)

Rhyparochromus vulgaris (Schilling) (Lygaeidae) VC13 (2017)

Scolopostethus grandis Horváth (Lygaeidae) VC13 (2017)

Scolopostethus pictus (Schilling) (Lygaeidae) VC13 (1960) Scolopostethus puberulus Horváth (Lygaeidae) VC13 (1990)

Taphropeltus contractus (Herrich-Schaeffer) (Lygaeidae) VC13 (2018)

Trapezonotus arenarius (Linnaeus) (Lygaeidae) VC14 (2018)

Trapezonotus desertus Seidenstücker (Lygaeidae) VC14 (2012)

Trapezonotus dispar Stål (Lygaeidae) VC14 (2007)

Tropistethus holosericus (Scholtz) (Lygaeidae) VC14 (2019)

Berytinus signoreti (Fieber) (Berytidae) VC13 (2016)

Neides tipularius (Linnaeus) (Berytidae) VC14 (1989)

Acalypta carinata (Panzer) (Tingidae) VC13 (1996)

Campylosteira verna (Fallén) (Tingidae) VC13 (1997)

Catoplatus fabricii (Stål) (Tingidae) VC13 (1996)

Dictyonota strichnocera Fieber (Tingidae) VC13 (2018)

Physatocheila smreczynskii China (Tingidae) VC13 (1960)

Stephanitis takeyai Drake & Maa (Tingidae) VC13 (2019) & VC14 (2018)

*Tingis angustata* (Herrich-Schaeffer) (Tingidae) VC14 (1902)

Coranus subapterus (De Geer) (Reduviidae) VC13 (2018) & VC14 (2014)

Empicoris culiciformis (De Geer) (Reduviidae) VC13 (2019)

Reduvius personatus (Linnaeus) (Reduviidae) VC14 (1974)

Himacerus boops (Schiødte) (Nabidae) VC13 (2011)

Nabis brevis Scholtz (Nabidae) VC14 (1930)

Nabis pseudoferus Remane (Nabidae) VC14 (2010)

Anthocoris limbatus Fieber (Anthocoridae) VC13 (2012) & VC14 (2015)

Anthocoris minki Dohrn (Anthocoridae) VC14 (2003)

Anthocoris sarothamni Douglas & Scott (Anthocoridae) VC13 (2001)

Anthocoris simulans Reuter (Anthocoridae) VC13 (2016) & VC14 (2007)

Anthocoris visci Douglas (Anthocoridae) VC14 (2013)

Buchananiella continua (F.B. White) (Anthocoridae) VC14 (2018)

Orius laticollis (Reuter) (Anthocoridae) VC13 (1999) & VC14 (2006)

Orius vicinus (Ribaut) (Anthocoridae) VC13 (1999)

Xylocoris galactinus (Fieber) (Anthocoridae) VC13 (1994)

Cimex lectularius Linnaeus (Cimicidae) VC13 (1999)

Amblytylus nasutus (Kirschbaum) (Miridae) VC13 (2018)

Atractotomus parvulus Reuter (Miridae) VC13 (1990)

Blepharidopterus diaphanus (Kirschbaum) (Miridae) VC13 (2008)

Brachyarthrum limitatum Fieber (Miridae) VC14 (2005)

Camptozygum aequale (Villers) (Miridae) VC13 (2011)

Capsodes flavomarginatus (Donovan) (Miridae) VC13 (1983)

Charagochilus gyllenhalii (Fallén) (Miridae) VC13 (2017)

Chlamydatus pulicarius (Fallén) (Miridae) VC13 (1982)

Conostethus griseus Douglas & Scott (Miridae) VC14 (1996)

Deraeocoris flavilinea (A. Costa) (Miridae) VC13 (2018)

Deraeocoris scutellaris (Fabricius) (Miridae) VC13 (2007) & VC14 (2015)

Dichrooscytus gustavi Josifov (Miridae) VC14 (2019)

Dicyphus annulatus (Wolff) (Miridae) VC13 (1997)

Dicyphus pallicornis (Fieber) (Miridae) VC13 (2010)

Dicyphus pallidus (Herrich-Schaeffer) (Miridae) VC14 (2017)

Europiella artemisiae (Becker) (Miridae) VC14 (1997)

Europiella decolor (Uhler) (Miridae) VC14 (2018)

Fieberocapsus flaveolus (Reuter) (Miridae) VC13 (2011)

Heterocordylus tibialis (Hahn) (Miridae) VC13 (2004)

Hoplomachus thunbergii (Fallén) (Miridae) VC13 (2000)

Lygus maritimus Wagner (Miridae) VC13 (2016) & VC14 (2014)

Lygus wagneri Remane (Miridae) VC13 (1997) & VC14 (1997)

Macrolophus pygmaeus (Rambur) (Miridae) VC14 (2015)

Macrolophus rubi Woodroffe (Miridae) VC13 (2015) & VC14 (2014)

Megacoelum beckeri (Fieber) (Miridae) VC13 (2017)

Megalocoleus tanaceti (Fallén) (Miridae) VC14 (2005)

Myrmecoris gracilis (R.F. Sahlberg) (Miridae) VC14 (2001)

Neolygus populi (Leston) (Miridae) VC13 (1986) & VC14 (2015)

Neolygus viridis (Fallén) (Miridae) VC13 (2017)

Orthops basalis (A. Costa) (Miridae) VC13 (2016)

Orthops kalmii (Linnaeus) (Miridae) VC14 (2015)

Orthotylus adenocarpi (Perris) (Miridae) VC13 (2008)

Orthotylus bilineatus (Fallén) (Miridae) VC13 (2012)

Orthotylus flavinervis (Kirschbaum) (Miridae) VC13 (1991)

Orthotylus ochrotrichus Fieber (Miridae) VC13 (2001)

Orthotylus tenellus (Fallén) (Miridae) VC13 (2017) & VC14 (2011)

Orthotylus virens (Fallén) (Miridae) VC13 (2002)

Orthotylus virescens (Douglas & Scott) (Miridae) VC13 (2011)

Orthotylus viridinervis (Kirschbaum) (Miridae) VC13 (2001) & VC14 (1999)

Pachytomella parallela (Meyer-Dür) (Miridae) VC14 (2019)

Parapsallus vitellinus (Scholtz) (Miridae) VC14 (1982)

Phoenicocoris obscurellus (Fallén) (Miridae) VC13 (2018)

Phytocoris populi (Linnaeus) (Miridae) VC14 (2017)

Phytocoris ulmi (Linnaeus) (Miridae) VC13 (2016)

Pilophorus cinnamopterus (Kirschbaum) (Miridae) VC13 (2018)

Pilophorus clavatus (Linnaeus) (Miridae) VC13 (2018)

Pinalitus viscicola (Puton) (Miridae) VC14 (2000)

Plagiognathus chrysanthemi (Wolff) (Miridae) VC13 (2018)

Polymerus palustris (Reuter) (Miridae) VC13 (2017)

Psallodema fieberi (Fieber) (Miridae) VC14 (2008)

Psallus assimilis Stichel (Miridae) VC14 (1990)

Psallus betuleti (Fallén) (Miridae) VC13 (2017) & VC14 (2015)

Psallus confusus Rieger (Miridae) VC13 (2014) & VC14 (2005)

Psallus falleni Reuter (Miridae) VC13 (2014)

Psallus flavellus Stichel (Miridae) VC14 (2011)

Psallus haematodes (Gmelin) (Miridae) VC13 (2014)

Psallus helenae Josifov (Miridae) VC14 (2017)

Psallus lepidus Fieber (Miridae) VC13 (1980)

Psallus luridus Reuter (Miridae) VC13 (2012) & VC14 (2009)

Psallus mollis (Mulsant & Rey) (Miridae) VC13 (2014)

Psallus perrisi (Mulsant & Rey) (Miridae) VC14 (2017)

Psallus quercus (Kirschbaum) (Miridae) VC14 (1998)

Psallus variabilis (Fallén) (Miridae) VC13 (2017)

Psallus wagneri Ossiannilsson (Miridae) VC13 (2017) & VC14 (2006)

Pseudoloxops coccineus (Meyer-Dür) (Miridae) VC13 (2017)

Reuteria marqueti Puton (Miridae) VC14 (2020)

Salicarus roseri (Herrich-Schaeffer) (Miridae) VC13 (2009) & VC14 (2010)

Stenodema trispinosa Reuter (Miridae) VC13 (1999)

Sthenarus rotermundi (Scholtz) (Miridae) VC13 (2020) & VC14 (2017)

Teratocoris caricis Kirkaldy (Miridae) VC13 (2017)

Tinicephalus hortulanus (Meyer-Dür) (Miridae) VC14 (2016)

Trigonotylus caelestialium (Kirkaldy) (Miridae) VC14 (2006)

Tupiocoris rhododendri (Dolling) (Miridae) VC13 (2010) & VC14 (2011)

Tuponia mixticolor (A. Costa) (Miridae) VC14 (2016)

Tytthus pygmaeus (Zetterstedt) (Miridae) VC13 (2017)

Chartoscirta cocksii (Curtis) (Saldidae) VC13 (2017)

Saldula opacula (Zetterstedt) (Saldidae) VC14 (2005)

Saldula orthochila (Fieber) (Saldidae) VC14 (2016)

Saldula pallipes (Fabricius) (Saldidae) VC13 (1989) & VC14 (2014)

Saldula palustris (Douglas) (Saldidae) VC14 (1989)

Velia saulii Tamanini (Veliidae) VC14 (1990)

Gerris lateralis Schummel (Gerridae) VC13 (2002)

Arctocorisa germari (Fieber) (Corixidae) VC13 (1983)

Corixa dentipes Thomson (Corixidae) VC14 (2002)

Sigara scotti (Douglas & Scott) (Corixidae) VC13 (2017)

Sigara striata (Linnaeus) (Corixidae) VC13 (1991)

Sigara venusta (Douglas & Scott) (Corixidae) VC13 (1982)

**ADDITIONS TO THE NORTH SOMERSET (VC6) HEMIPTERA-HETEROPTERA LIST.** This note reports the first records of two bug species in Somerset (and VC6). The first is *Berytinus hirticornis* (Brullé) (Berytidae), adults being numerous in suction samples taken on 23 June 2020 from species rich grassland above the River Avon in Lambridge (ST7666). Sweeping in the same area yielded several adults of *Closterotomus trivialis* (A. Costa) (Miridae). This plant bug is now common in the Greater London area in municipal parks and gardens, but its appearance in a wild setting so far in the west was a surprise, though the site is adjacent to gardens, and the locals had been dumping garden cuttings etc. onto the grassland nearby. JONTY DENTON, *31 Thorn Lane, Four Marks, Hants GU34 5BX*.

ARENOCORIS FALLENII (SCHILLING, 1829) (HEMIPTERA: COREIDAE) NEW TO VC22. A solitary specimen of Arenocoris fallenii was found by hand searching on 6 May 2020 at a site in VC22 (Watsonian Berkshire), but in the administrative county of Oxfordshire, a double first. Further solitary specimens were taken in a pitfall trap 5 to 22 May, 22 May to 5 June and 5 to 22 June; the last period also including an immature. A single specimen was also found by hand searching on 7 June. It would appear that the bug has recently become established at the site. A pit fall trap was operated in the same location in 2018 but then no Arenocoris fallenii were found. The site lies in hectad SU49 on the Mid-Vale Ridge natural region of Natural England, where there is a sandy channel through the Corallian Limestone. The habitat is essentially 'Breckland', being warm, fast-draining sand which varies from alkaline to slightly acidic. The site is greatly disturbed by rabbit burrowing, so that there is plenty of bare sand. The sward is very short due to the intensive rabbit grazing, with Common Storksbill, Erodium cicutarium, being widespread. Arenocoris fallenii is believed to be associated with this plant. The whole field that contains the site has been fallow for at least twenty years, and is rich in Heteroptera including the lygaeids Megalonotus praetextatus (Herrich-Schaeffer), Graptopeltus lynceus (Fabricius) and Drymus pumilio Puton. J. M. CAMPBELL, 249 Radley Road, Abingdon, OX14 3SL.

# CAMPYLOMMA VERBASCI (MEYER-DÜR) (HEMIPTERA: MIRIDAE) NEW TO OXFORDSHIRE (VC23)

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I have often wondered why this species was absent from my reference collection, and I presumed that it must be rare. I have only occasionally encountered its host plant, mullein (*Verbascum*), in the countryside, and beating the leaves and flowering stems never produced the bug. However, my luck changed on 20 August 2020. Walking back through University Parks, Oxford from an unsuccessful expedition to New Marston Meadows, I noticed several mulleins behind the Cricket Pavilion. They had all gone to seed, and the leaves were almost entirely shrivelled brown. Nevertheless, beating the stems and lowest leaves quickly delivered several dozen adults of *C. verbasci*. Also present was over a dozen adults of *Liocoris tripustulatus* (Fabricius) (Miridae) and a singleton of *Nysius huttoni* F.B. White (Lygaeidae). I was surprised to find on consulting the latest interim release of the atlas (Ryan, 2020) that there were only a dozen recorded vice-counties for *C. verbasci*, and that Oxfordshire (VC23) was not one of them. Maybe this species is indeed rarely encountered.

#### Reference

Ryan, R. P. 2020. Vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. Interim release May 2020. https://sites.google.com/site/britishhetbugatlas/.

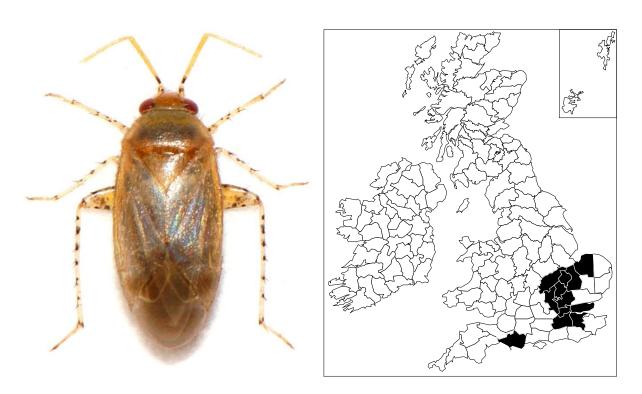


FIGURE 1. Campylomma verbasci and its previous vice-county distribution (Ryan, 2020).

# ORSILLUS DEPRESSUS (MULSANT & REY) (HEMIPTERA: LYGAEIDAE) ON JUNIPER, JUNIPERUS (CUPRESSACEAE), AND GLOBICEPS JUNIPERI REUTER (HEMIPTERA: MIRIDAE) NEW TO WATSONIAN OXFORDSHIRE (VC23)

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There are three species of juniper-associated Hemiptera-Heteroptera currently residing in the British Isles: Cyphostethus tristriatus (Fabricius) (Acanthosomatidae); Orsillus depressus (Mulsant & Rey) (Lygaeidae); and Dichrooscytus gustavi Josifov (Miridae). All three have been recorded on other members of the cypress family, and given the scarcity of juniper in southern England, they are all arguably more easily found here in urban cemeteries, parks and gardens than in chalk uplands. However, it is curious that of the three, O. depressus has not yet been reported from juniper in the British Isles; and seems instead to be specific for the unnatural host Lawson Cypress, Chamaecyparis lawsoniana (Murr.) Porlatore (Cupressaceae). I have often searched juniper for bugs in the Chiltern Hills (Ryan, 2012 & 2018) and not encountered it, until 5 June 2018 at Pulpit Hill, Buckinghamshire (National Grid Reference SP828049). Here, whilst searching for minute bugs (Microphysidae), I took four adults of the insect. When later sieving the debris beaten from the juniper, I found a tiny lygaeid nymph, which I was unable to rear to adult, but which may have been of the same species. In culture, two more of the nymphs were seen, presumably having hatched from eggs laid on the enclosed sprig of juniper. There were later captures on juniper at two other sites: Aston Rowant National Nature Reserve, Oxfordshire (SU725964) on 13 June 2018 (three nymphs); and Chinnor Hill, Oxfordshire (SP767006) on 15 June 2018 (one adult).

At this last site, I also beat a single example of *Globiceps juniperi* Reuter (Miridae) (formerly known in the British Isles as *G. salicicola* and *G. woodroffei*), which is new to VC23. According to the latest interim release of the atlas (Ryan, 2020), this insect has a sparse recorded distribution, comprising a dozen vice-counties ranging the length of Britain, from West Sussex (VC13) in the south to East Ross & Cromarty (VC106) in the north, suggesting that it is either an elusive insect, or one very particular about its habitat. In spite of its name, this bug is associated with ericaceous heaths in England (Woodroffe, 1959a & 1959b; Hodge, 1994; Denton, 1997; Alexander *et al.*, 1999) and moorland in Scotland (Woodroffe, 1965, 1967 & 1971); although Wagner & Weber (1964) state that on the continent it lives on conifers of the genera *Juniperus* and *Pinus* (Pinaceae) in the mountains. So, maybe *G. juniperi* is our fourth species of juniper-associated Heteroptera. Will it also, in time, take to cypresses in our urban areas?

I am most grateful to Berend Aukema, Mark Telfer, Darren Mann and Mike Wilson for their help in the early stages of my research on *G. juniperi*.

#### References

- Alexander, K. N. A., Foster, A. P. & Goddard, D. G. 1999. Exhibit. *Journal of Entomology and Natural History* **12**:179.
- Denton, J. S. 1997. Recent records of rare and local Hemiptera in Surrey and North Hampshire. *British Journal of Entomology and Natural History* **133**:79-80.
- Hodge, P. J. 1994. Exhibit. *Journal of Entomology and Natural History* 7:174.
- Ryan, R. P. 2012. *Dichrooscytus gustavi* Josifov (Hem., Miridae) doing well in the Chiltern Hills. *Entomologist's Record and Journal of Variation* **124**: 201-202.
- Ryan, R. P. 2018. Minute bugs (Hemiptera: Microphysidae) in association with evergreens and conifers. *British Journal of Entomology and Natural History* **31**: 25-26.
- Ryan, R. P. 2020. Vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. Interim release May 2020. https://sites.google.com/site/britishhetbugatlas/.
- Wagner, E. & Weber, H. H. 1964. *Fauna de France 67, Hétéroptères Miridae*. Fédération Française des Sociétés de Sciences Naturelles, Office Central de Faunistique, Paris.

Woodroffe, G. E. 1959a. Notes on some Hemiptera-Heteroptera from Witley Common, Surrey. *Entomologist* **92**: 6-13.

Woodroffe, G. E. 1959b. *Globiceps salicicola* Reuter (Hem., Miridae) new to Britain. *Entomologist* **92**: 61-65.

Woodroffe, G. E. 1965. A note on some Hemiptera-Heteroptera from the Aviemore district, Inverness-shire. *Entomologist's Monthly Magazine* **101**: 143-144.

Woodroffe, G. E. 1967. Further notes on some Hemiptera-Heteroptera from the Aviemore district, Inverness-shire. *Entomologist's Monthly Magazine* **103**: 220.

Woodroffe, G. E. 1971. Hemiptera from the Braemar area (Aberdeenshire) including the first British record of *Dikraneura contraria* Ribaut (Hem., Cicadellidae). *Entomologist's Monthly Magazine* **107**: 172-173.

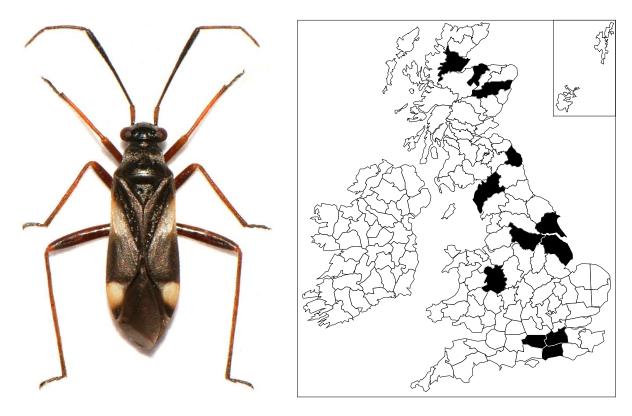


FIGURE 1. Globiceps juniperi (female) and its previous vice-county distribution (Ryan, 2020).

COMPLETED VOLUMES OF THE HEMIPTERIST ARE NOW AVAILABLE FOR DOWNLOAD FROM THE INTERNET ARCHIVE. Hitherto, the digital version of this journal has only been available from a Google Sites webpage (https://sites.google.com/site/thehemipterist/). However, completed volumes 1 to 6 have now been uploaded to the Internet Archive (https://archive.org/), and can be found in my user account (https://archive.org/details/@robryanbugs). In case anyone is wondering why I have never set up a proper website for this journal, it is because I have not found a way of doing this where I have full control over the content and where I don't have to make regular payments. The importance of the payments is not only because I am a Yorkshireman, but also because if I am hit by a bus the journal is liable to disappear the moment the next payment becomes overdue. Google Sites and Internet Archive are both free of charge; and will persist for long enough for everyone to realise that I am no longer around, and for someone to step in and take over. The addition of a second digital source makes the situation more robust. If anyone knows of other digital platforms where I could deposit the Hemipterist, free of charge and with full personal control over the content, please do let me know. R. P. RYAN, 38 St John Street, Oxford, OX1 2LH, RobRyanBugs@gmail.com.

# WHERE DOES THE SAINT GEORGE'S BUG, HARPOCERA THORACICA (FALLÉN) (HEMIPTERA: MIRIDAE), LAY ITS EGGS?

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The commonest form of life cycle adopted by members of the British Isles Hemiptera-Heteroptera is a single generation per year, passing the winter months as either adults or eggs. In the former case, the bugs can be found in the adult state in most or all of the year, with possibly a brief hiatus in midsummer, when the last of the overwintered generation has died and the first of the new generation has yet to mature from nymphs. In the latter case, the bugs typically exist for most of the year as eggs, with the adults appearing only briefly during a particular time of year. Although some species may have multiple generations each year, and are therefore to be found over a broader period of time, typically the egg-hibernating species appear as adults for a month or so in late spring, early summer, late summer or early autumn. Among the earliest of such bugs is *Harpocera thoracica* (Fallén) (Miridae), which I have found as adults from late April to early June; and the latest is *Pantilius tunicatus* (Fabricius) (Miridae) which appears as adults from mid-September to late October.

To my mind, a key question to be asked about the egg-hibernators is where they lay their eggs, so that they are protected from the dry heat of the summer, from the cold damp of the winter, from predators and parasites, and from disruptive changes to the host plant such as occur in the spring and autumn. For the adult-hibernators these challenges are less of an issue as the egg stage is so brief (typically one to two weeks), and the eggs are often laid exposed on plant material rather than inserted within it. But, for the egg-hibernators their solution must provide protection continuously for ten to eleven months, without the option of movement that is available to adults and nymphs. In the particular case of species which live on deciduous trees, the eggs cannot generally be laid in the leaves or reproductive parts as these are usually shed in the autumn. For vegetarian species, if eggs are laid in crevices of the trunk or limbs the newly hatched nymphs will have a long walk to find their first meal among the leaves and reproductive parts at the end of the twigs. One option is for eggs to be laid in or around the buds that will produce the new growth in the following spring; but in the case of the aforementioned *H. thoracica*, a vegetarian which lives on oaks, *Quercus* spp. (Fagaceae), this is not possible as the buds do not exist at the time this species lays its eggs.

I decided to investigate this matter in 2016 by incubating a dozen gravid females of *H. thoracica* I had beaten from oaks in University Parks, Oxford (SP516072) on 12, 16 and 19 May, with cuttings from the oaks. Given the possibility that eggs may already be present in this plant material, and the difficulty sometimes of finding eggs inserted into plants, I divided the cuttings into two halves. One half was used to culture the bugs, and the other half was retained as a control. The culture ended on 26 May when all the females had died. 66 eggs were found inserted into the oak cuttings, and 187 unlaid eggs were found by dissecting the dead females. The laid and unlaid eggs had the same anatomy, and no eggs of this form were found in the control batch of cuttings, so I concluded that the laid eggs I found had come from the incubated females. All of the laid eggs were located in the same situation: inserted on the inside of a twig junction, in particular where new growth arose from the supporting twig. They were found by peeling back the plant tissue at the junction. The eggs were long tubes with a flap/blade at one end instead of the round/oval 'cap' I normally associate with eggs inserted into plant tissue. A small number of eggs of different anatomy were found during the search, which were presumably laid by other oak species, indicating that *H. thoracica* is not alone in its choice of site for egg-laying.

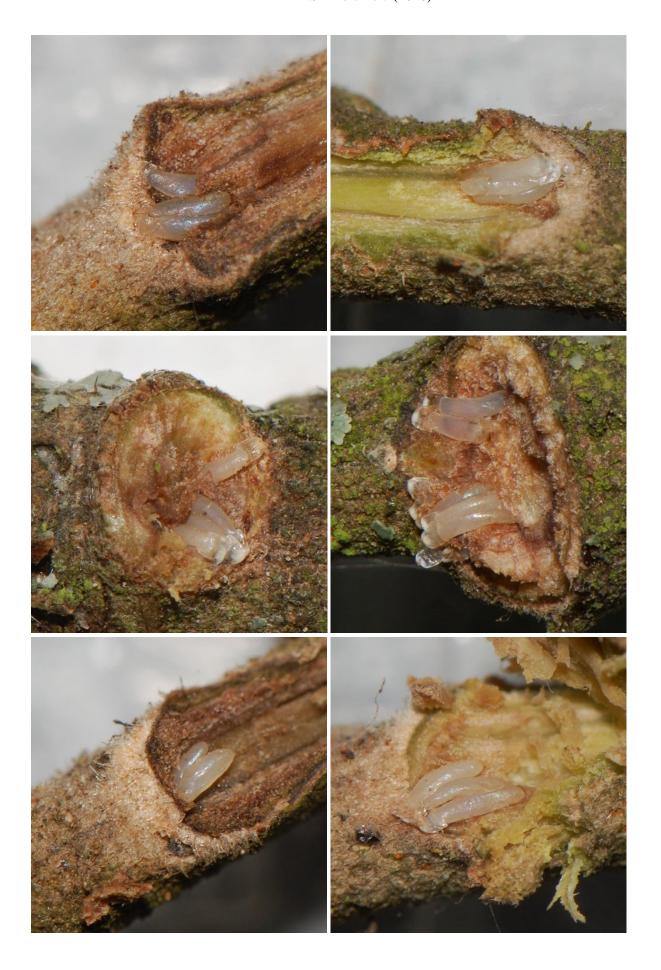
The situation of the eggs of *H. thoracica* will be close to the new plant growth of the following year, and thereby to where the emerging nymphs can find their first meal. I would imagine that eggs buried so deep within the oak tissue would be better protected from desiccation, frost, predators and the ovipositors of parasites than those in a shallow situation with an exposed cap. The escape route for the emerging nymphs seems a little narrow, but although they lack biting mouthparts to widen the exit, they may use their stylets to achieve the same result.

I notice from the literature that *H. thoracica* does not have an English name. Dipterists have an early species with the English name The Saint Mark's Fly, *Bibio marci* (Linnaeus) (Bibionidae), so named

because the adults are said to first appear each year on or about Saint Mark's Day (25 April). Given that, in my experience, the first adults of *H. thoracica* appear on or about Saint George's Day (23 April), it seems appropriate to name this species The Saint George's Bug.



FIGURE 1. *Harpocera thoracica* nymphs (top), adult male (bottom left) and female (bottom right), and eggs laid in oak (next page), revealed by peeling away new growth from a twig (not to the same scale).



# SOME REVISIONS TO THE ANNOTATED CHECKLISTS OF AMBIGUOUS SPECIES NAMES AND TEXTBOOK ADDENDA

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Further to Ryan (2020), I present additional revisions to the annotated checklists of ambiguous species names (Ryan, 2015, 2016b, 2018b & 2018d) and textbook addenda (Ryan, 2012, 2013, 2014, 2016a, 2018a & 2018c), in light of the ongoing work towards the Review of Published Records which began publication in the present volume of this journal. These are as follows.

# Drymus latus Douglas & Scott (Lygaeidae) new to the British Isles twice

Drymus latus is described as new to science by Douglas & Scott (1871). However, Douglas & Scott (1875) reduces *D. latus* to a junior synonym of *Drymus pilicornis* (Mulsant & Rey), which species was included in Douglas & Scott (1865), as *Rhyparochromus pilicornis*. Saunders (1892) concurs. But, Butler (1904) presents *Drymus confusus* as new to the British Isles, points out that both it and *D. pilicornis* have previously been confused, and seems to say that the type example of *D. latus* is of the former species. Butler (1923) includes *D. latus*, with *D. confusus* as a junior synonym, separate from *D. pilicornis*. The authority of Douglas & Scott for *D. latus*, both in this text and today, identifies this species as being the one described in 1871. Hence, the species *D. latus* has been presented as new to the British Isles twice, in 1871 and 1904. As Ryan (2018b) states, prior to Butler (1904) the name *D. pilicornis* could refer to either species; and I assume that the *R. pilicornis* of Douglas & Scott (1865) is also ambiguous. Although Douglas & Scott subsequently described *D. latus* as distinct, they then said it was the same, suggesting uncertainty as to which species *R. pilicornis* actually refers.

# Identity of *Eremocoris erraticus* (Lygaeidae) of Douglas & Scott (1865)

In Ryan (2018c) I listed the name *Eremocoris erraticus* of Douglas & Scott (1865) as corresponding to the modern *Eremocoris fenestratus* (Herrich-Schaeffer), following the synonymy of Saunders (1892), bearing in mind the subsequent confusion of this species with *Eremocoris abietis* (Linnaeus) (Ryan, 2015). However, Douglas & Scott mention a second form of their *E. erraticus*, described as follows.

'Dr. Power captured, in April, 1864, at Littlington, Cambridgeshire, under dead leaves at the bottom of a hedge, about 30 specimens, which are all of one type, and, we thought, distinct from our usual form of *E. erraticus*'

This record is listed by Saunders (1892) and Butler (1923) under accounts corresponding to the modern *Eremocoris podagricus* (Fabricius). Consequently, the *E. erraticus* of Douglas & Scott (1865) corresponds to both the modern *E. podagricus* and *E. fenestratus/abietis*. Although the above Cambridgeshire record can be unambiguously assigned to *E. podagricus*, all other records for the name *E. erraticus* must be regarded as confused between the aforementioned three species.

A further confusion is that both Douglas (1875) and Saunders (1875) give *E. erraticus* as referring solely to *E. podagricus*. Records for the latter name from this time until Saunders (1892) might not therefore be the modern *E. podagricus*. However, I have not found any such records.

#### Records for Ischnodemus sabuleti (Fallén) and Ischnodemus quadratus Fieber (Lygaeidae)

The former was included as a British Isles species by Douglas & Scott (1865), but the latter species was not recognised here until Scudder (1957), albeit as the subspecies *Ischnodemus sabuleti quadratus*. Although the former is today recorded over most of England and Wales (Ryan, 2019), the latter remains confined to the Kent coast near Folkestone. The existence of old specimens of *I. quadratus* in collections standing over the name *I. sabuleti*, mentioned by Scudder, indicates that the two forms have long been

confused. However, given the restricted geographic range of *I quadratus*, there are no grounds for regarding all old records of *I. sabuleti* as being ambiguous. Nevertheless, records for the name *I. sabuleti* stated as being from Folkestone or the East Kent coast, such in Douglas & Scott (1865), should be checked against a supporting specimen.

#### Records for Lygaeus equestris (Linnaeus) (Lygaeidae)

The records for the name *Lygaeus equestris* in the British Isles were cast into doubt as to their identity following a species-split with *Lygaeus simulans* Deckert (Ryan, 2015). The following are all of the British Isles records I have found in the entomological literature, six definitely from the British Isles: three from Kent (Sheppey and twice at St. Margaret's Bay); one from Wiltshire (Devizes); one from Somerset (Bath); and one from Devon (Braunton). The Devizes record has been identified as *L. simulans*, but the other five remain of uncertain identity. If anyone can provide the identity of these five records from the identification of supporting specimens, or knows of other records, please do publish your findings, or otherwise let me know.

Douglas & Scott (1867). 'A single specimen in Dr. Power's collection, captured at Devizes by Mr. Joseph Sidebotham, in June, 1864. Curtis has figured this species in his "British Entomology," but the account he gives of its capture in Britain seemed so dubious, that we placed it among the "Reputed British Species" [in Douglas & Scott (1865)]'.

Hall (1886). Specimen taken sweeping on the cliffs at Dover on 7 September 1886.

Saunders (1892). 'Very rare. Bath, Mitford, 1837, fide C. W. Dale; Devizes, 1864, Sidebotham; Dover, 1886, C. G. Hall'.

Walker (1900). Further detail given for the Hall Dover record 'near St. Margaret's Bay'.

Walker (1906). Specimen taken 'on the afternoon of September 22nd [1906], on the grass on one of the landslips of the Sheppey cliffs, about four miles from Sheerness'.

Beare (1907). Specimen taken 'on the cliffs close to the Granville Hotel [St. Margaret's Bay] on a hot sunny still day (August 29th [1907]) ... sitting on a flowering umbel'. Further detail given of the above Walker Sheppey record: 'It was found, I believe, on a flower head of Centaurea nigra'.

China (1926). A specimen labelled *Lygaeus equestris* without location in the Stephensian Collection. Also one specimen labelled *Lygaeus saxatilis* (S. Wales), and two specimens labelled *Lygaeus albomaculatus* (Bristol).

Walker (1933). Specimen in the Dale Collection, labelled 'from Mitford as his own taking, 1837', supporting the Mitford Bath record of Saunders (1892).

Leston (1950). A sixth British Isles record: 'Mr. D. Leston, The bug *Lygaeus equestris* L. taken at Braunton, Devon, in late June, 1950, by Mr. R. D. Weal'.

Judd (1996). Announcement of the species-split with *L. simulans*. Three Natural History Museum specimens in the Massee collection from Goodwood, Sussex, collected in July 1925, labelled 'British', and bought from a Bournemouth entomological dealer. [I have not regarded these specimens are being definitely British, given their provenance, and that Judd did not state their identity.] The Natural History Museum specimen from Devizes is stated as being *L. simulans*. [Alas, Devizes is on the border between VC7 and VC8 and this record cannot be assigned unambiguously to one of these two vice-counties. It is therefore not included in the Vice-county Distribution and Atlas (Ryan, 2019).]

#### Megalonotus sabulicola (Thomson) (Lygaeidae) new to the British Isles twice

This species was first reported as new to the British Isles by Douglas (1875), as *Rhyparochromus sabulicola*, with a comment that it had 'doubtless been confounded with' *Megalonotus chiragra* (Fabricius). However, in Saunders (1892) it is reduced to being a variety of *M. chiragra*. Butler (1923) treats it similarly, and Southwood & Leston (1959) does not mention it at all. But, Southwood (1963) restored the species to specific rank in the British Isles, providing a second new to the British Isles report for *M. sabulicola*.

The confusion of this species with *M. chiragra* is potentially complex. Clearly, prior to Douglas (1875) *M. sabulicola* will 'doubtless' have been recorded as *M. chiragra*. However, in the period when

the former was regarded as a variety of the latter, it is uncertain whether *M. sabulicola* would always have been reported as the variety, or as *M. chiragra*. I have taken the pragmatic view that before the first new to British Isles report there was confusion, but after that time there was not. This may not be the case. For instance, the county tables of Bedwell (1945) and Massee (1955) do not mention *sabulicola*, and it is not clear whether records for *sabulicola* are left out or pooled with *chiragra*, and whether this makes any difference to the county distribution of the latter. All records for *M. chiragra* prior to Aukema & Nau (1992) are confused anyway with *Megalonotus emarginatus* (Rey), so a three-way confusion including *M. sabulicola* does not change the status of the records as being ambiguous and therefore discounted unless traced to a specimen to confirm their identity. I have assumed that *M. sabulicola* is not confused with *M. emarginatus*, and that all records with the name *sabulicola* unambiguously refer to the former species.

#### References

- Aukema, B. & Nau, B. S. 1992. *Megalonotus emarginatus* (Rey) (Lygaeidae) and *Trigonotylus caelestialium* (Kirkaldy) (Miridae) (Hem.-Het.) new to Britain. *Entomologist's Monthly Magazine* **128**: 11-14.
- Beare, T. H. 1907. Lygaeus equestris, Linn., at St. Margaret's Bay. Entomologists' Monthly Magazine 43: 237.
- Bedwell, E. C. 1945. The county distribution of the British Hemiptera-Heteroptera. *Entomologist's Monthly Magazine* **81**: 253-273.
- Butler, E. A. 1904. Two additional species of British Hemiptera. *Entomologists' Monthly Magazine* **40**: 275-276.
- Butler, E. A. 1923. A biology of the British Hemiptera-Heteroptera, H. F. & G. Witherby, London.
- China, W. E. 1926. The Stephensian Collection of British Hemiptera. *Entomologists' Monthly Magazine* **62**: 93.
- Douglas, J. W. 1875. British Hemiptera additions and corrections. *Entomologists' Monthly Magazine* **11**: 263-267.
- Douglas, J. W. & Scott, J. 1865. British Hemiptera-Heteroptera, Ray Society.
- Douglas, J. W. & Scott, J. 1867. British Hemiptera: additions and corrections. *Entomologists' Monthly Magazine* **4**: 1-6.
- Douglas, J. W. & Scott, J. 1871. British Hemiptera. Additions and corrections. *Entomologists' Monthly Magazine* **8**: 23-29.
- Douglas, J. W. & Scott, J. 1875. Hemiptera: synonymic notes. *Entomologists' Monthly Magazine* 11: 184-186
- Hall, C. G. 1886. Lygaeus equestris, L., at Dover. Entomologists' Monthly Magazine 23: 106.
- Judd, S. 1996. An annotated checklist of British and Channel Island Lygaeidae (Hemiptera: Heteroptera). *Entomologist's Gazette* **47**: 123-137.
- Leston, D. 1950. Exhibit. Proceedings and Transactions of the South London Entomological and Natural History Society 1950-51: 14.
- Massee, A. M. 1955. The county distribution of the British Hemiptera-Heteroptera, second edition. *Entomologist's Monthly Magazine* 91: 7-27.
- Ryan, R. P. 2012. An addendum to Southwood & Leston's land and water bugs of the British Isles. *British Journal of Entomology and Natural History* **25**: 205-215.
- Ryan, R. P. 2013. Recent changes to the British list of the Hemiptera-Heteroptera. *British Journal of Entomology and Natural History* **26**: 209-210.
- Ryan, R. P. 2014. A list of the species of Hemiptera-Heteroptera recorded in the British Isles. *Hemipterist* 1: 2-14.
- Ryan, R. P. 2015. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera since Massee (1955). *Hemipterist* 2: 4-8.
- Ryan, R. P. 2016a. An addendum to Butler's Biology of the British Hemiptera-Heteroptera. *Hemipterist* **3**: 1-13.
- Ryan, R. P. 2016b. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera from Butler (1923) to Massee (1955). *Hemipterist* **3**: 15-17.

- Ryan, R. P. 2018a. An addendum to Saunders' Hemiptera-Heteroptera of the British Islands. *Hemipterist* 5: 1-13.
- Ryan, R. P. 2018b. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera from Saunders (1892) to Butler (1923). *Hemipterist* 5: 14-15.
- Ryan, R. P. 2018c. An addendum to Saunders' Synopsis of British Hemiptera-Heteroptera and Douglas & Scott's British Hemiptera-Heteroptera. *Hemipterist* 5: 101-113.
- Ryan, R. P. 2018d. An annotated checklist of the ambiguous species names of Hemiptera-Heteroptera from Douglas & Scott (1865) to Saunders (1892). *Hemipterist* 5: 114-118.
- Ryan, R. P. 2019. The vice-county distribution and atlas of the Hemiptera-Heteroptera of the British Isles. *Hemipterist* **6**: 1-210.
- Ryan, R. P. 2020. Some revisions to the annotated checklists of ambiguous species names. *Hemipterist* 7: 281-284.
- Saunders, E. 1875. Synopsis of British Hemiptera-Heteroptera. Part I. *Transactions of the Entomological Society of London* **1875**: 117-159.
- Saunders, E. 1892. Hemiptera-Heteroptera of the British Islands. L. Reeve & Co, London.
- Scudder, G. G. E. 1957. The subspecies of *Ischnodemus sabuleti* (Fallén) (Hem., Lygaeidae). *Entomologists' Monthly Magazine* **93**: 14-18.
- Southwood, T. R. E. & Leston, D. 1959. *Land and water bugs of the British Isles*, Frederick Warne & Co. Ltd., London.
- Southwood, T. R. E. 1963. *Megalonotus sabulicola* (Thomson, 1870) (Hem., Lygaeidae) in Britain. *Entomologist* **96**: 124-126.
- Walker, J. J. 1900. The Coleoptera and Hemiptera of the Deal sandhills. *Entomologists' Monthly Magazine* **36**: 94-101.
- Walker, J. J. 1906. *Lygaeus equestris*, L., in the Isle of Sheppey. *Entomologists' Monthly Magazine* **42**: 258.
- Walker, J. J. 1933. The British Hemiptera-Heteroptera of the Dale Collection. *Entomologists' Monthly Magazine* **69**: 234-245.